

Table A-1. Chemistry and Metallurgy Research Building Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
CMR	Acetic Acid	64-19-7	kg/yr	0.2	0.5						
	Acetone	67-64-1	kg/yr	2.5	7.1	6.10	17.41			1.94	5.53
	Acetonitrile	75-05-8	kg/yr					0.27	0.79		
	Acetylene	74-86-2	kg/yr							0.00	5.26
	Ammonium Chloride (Fume)	12125-02-9	kg/yr	0.3	0.8						
	Arsenic, el.&inorg.,exc. Arsine, as As	7440-38-2	kg/yr					0.20	0.56	0.39	1.12
	Diethylene Triamine	111-40-0	kg/yr	0.3	1.0			0.17	0.48		
	Ethanol	64-17-5	kg/yr	3.1	9.0	4.01	11.47	2.95	8.43	2.62	7.50
	Ethyl Acetate	141-78-6	kg/yr					0.16	0.45		
	Formic Acid	64-18-6	kg/yr	10.0	28.7	0.43	1.22				
	Hydrogen Bromide	10035-10-6	kg/yr	1.6	4.5	1.05	3.01	0.74	2.10	1.05	3.00
	Hydrogen Chloride	7647-01-0	kg/yr	43.2	123.4	5.00	14.27	11.43	32.64	21.81	62.32
	Hydrogen Fluoride, as F	7664-39-3	kg/yr	0.3	0.7	0.69	1.98	0.60	1.73	0.09	0.25
	Hydrogen Peroxide	7722-84-1	kg/yr	24.1	68.9	0.30	0.85			1.72	4.92
	Lead, el.& inorg.compounds, as Pb	7439-92-1	kg/yr							0.03	3.00
	Magnesium Oxide Fume	1309-48-4	kg/yr	0.4	1.0						
	Mercury numerous forms	7439-97-6	kg/yr					0.01	1.36	0.01	1.36
	Methyl Alcohol	67-56-1	kg/yr	0.1	0.4	2.22	6.34	8.86	25.33	0.72	2.06
	Methylene Chloride	75-09-2	kg/yr			0.47	1.33			0.46	1.33
	Molybdenum	7439-98-7	kg/yr							0.36	1.02
	n-Amyl Acetate	628-63-7	kg/yr	0.2	0.4						
	Nitric Acid	7697-37-2	kg/yr			7.49	21.41	54.48	155.65	51.81	148.02
	Nitric Oxide	10102-43-9	kg/yr			2.93	8.36				
	Pentane (all isomers)	109-66-0	kg/yr					0.22	0.63		
	Phosphoric Acid	7664-38-2	kg/yr	9.6	27.5			8.02	22.93	9.63	27.51
	Potassium Hydroxide	1310-58-3	kg/yr	16.9	48.3						
	Propane	74-98-6	kg/yr	0.0	219.3	0.00	392.98	0.00	551.69	0.00	155.10
	Rhodium Metal	7440-16-6	kg/yr					3.26	9.31		

Table A-1. Chemistry and Metallurgy Research Building Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Sulfur Hexafluoride	2551-62-4	kg/yr							5.17	14.76
	Sulfuric Acid	7664-93-9	kg/yr	70.8	202.4	6.61	18.90	7.89	22.54	25.44	72.68
	Tetrahydrofuran	109-99-9	kg/yr					0.31	0.89		
	Tin numerous forms	7440-31-5	kg/yr			0.01	0.50	0.01	0.50		
	Toluene	108-88-3	kg/yr			0.30	0.87				
	Uranium (natural) Sol. & Unsol. Comp. as U	7440-61-1	kg/yr							0.67	1.90
	Yttrium	7440-65-5	kg/yr					0.16	0.45		
	Zinc Oxide Fume	1314-13-2	kg/yr			0.01	0.50				

Table A-2. Bioscience Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
HRL	1,4-Dioxane	123-91-1	kg/yr	0.4	1.0					0.18	0.52
	2-Methoxyethanol (EGME)	109-86-4	kg/yr	0.2	0.5						
	Acetic Acid	64-19-7	kg/yr	4.0	11.5	12.36	35.31	10.65	30.43	11.20	32.00
	Acetic Anhydride	108-24-7	kg/yr	8.4	24.1						
	Acetone	67-64-1	kg/yr	10.6	30.4	0.55	1.58	0.41	1.18	0.28	0.79
	Acetonitrile	75-05-8	kg/yr	231.6	661.6	147.16	420.44	39.32	112.36	18.45	52.72
	Acrylamide	79-06-1	kg/yr	0.6	1.6			0.39	1.12		
	Ammonium Chloride (Fume)	12125-02-9	kg/yr	0.6	1.6			0.35	1.00	0.18	0.50
	Catechol	120-80-9	kg/yr	0.7	2.0						
	Chlorodifluoromethane	74-45-6	kg/yr			0.10	0.28				
	Chloroform	67-66-3	kg/yr	2.6	7.6	2.86	8.17	3.93	11.24	8.85	25.29
	Chromic Acid	1333-82-0	kg/yr	1.3	3.8						
	Cyclohexane	110-82-7	kg/yr	0.1	0.4						
	Diethanolamine	111-42-2	kg/yr					0.18	0.50		
	Ethanol	64-17-5	kg/yr	94.2	269.1	26.07	74.48	54.56	155.88	0.55	1.56
	Ethanolamine	141-43-5	kg/yr	0.7	2.0						
	Ethyl Acetate	141-78-6	kg/yr							0.14	0.41
	Ethyl Ether	60-29-7	kg/yr	2.9	8.4			1.96	5.60	1.23	3.50
	Ethylene Diamine	107-15-3	kg/yr	4.2	12.0						
	Ethylene Dichloride	107-06-2	kg/yr					0.22	0.62		
	Formamide	75-12-7	kg/yr	5.2	14.9	0.20	0.57	0.20	0.57	0.87	2.47
	Formic Acid	64-18-6	kg/yr					0.64	1.83	0.21	0.60
	Glutaraldehyde	111-30-8	kg/yr							0.39	1.10
	Hexane (other isomers)* or n-Hexane	110-54-3	kg/yr	0.3	1.0						
	Hexylene Glycol	107-41-5	kg/yr	0.1	0.4						
	Hydrogen Chloride	7647-01-0	kg/yr	2.1	5.9	3.96	11.30	5.23	14.96	10.18	29.08
	Hydrogen Fluoride, as F	7664-39-3	kg/yr	0.2	0.5						
	Hydrogen Peroxide	7722-84-1	kg/yr	0.5	1.4	1.27	3.62	0.25	0.70	4.23	12.10
	Hydrogen Sulfide	7783-06-4	kg/yr					0.08	0.23		

Table A-2. Bioscience Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Iso-Amyl Alcohol	123-51-3	kg/yr	0.7	2.0					0.11	0.32
	Isopropyl Alcohol	67-63-0	kg/yr	21.9	62.4	25.07	71.63	16.91	48.31	18.83	53.81
	Mercury, numerous forms	7439-97-6	kg/yr	0.0	0.5						
	Methyl Alcohol	67-56-1	kg/yr	28.5	81.3	18.30	52.30	25.73	73.52	26.31	75.18
	Methylamine	74-89-5	kg/yr			0.32	0.90				
	Methylene Chloride	75-09-2	kg/yr	16.9	48.4			0.98	2.79		
	n,n-Dimethylformamide	68-12-2	kg/yr	0.6	1.6	0.33	0.95	0.17	0.47	0.25	0.71
	n-Butyl Alcohol	71-36-3	kg/yr	0.6	1.6						
	Nitric Acid	7697-37-2	kg/yr			0.27	0.76	2.67	7.63	0.27	0.76
	Paraffin Wax Fume	8002-74-2	kg/yr	0.2	0.5						
	Phenol	108-95-2	kg/yr	1.9	5.6	0.63	1.80	0.68	1.95	0.30	0.85
	Phosphoric Acid	7664-38-2	kg/yr	1.0	3.0	0.32	0.92	0.32	0.92	0.32	0.92
	Potassium Hydroxide	1310-58-3	kg/yr	0.2	0.5	0.18	0.50	0.18	0.53	0.70	2.00
	Sec-Butyl Alcohol	105-46-4	kg/yr	0.1	0.4						
	Sulfuric Acid	7664-93-9	kg/yr	1.7	4.8	0.65	1.84	0.64	1.84		
	tert-Butyl Alcohol	75-65-0	kg/yr			0.28	0.79			0.14	0.39
	Tetrahydrofuran	109-99-9	kg/yr	17.2	49.2						
	Tetrasodium Pyrophosphate	7722-88-5	kg/yr	0.2	0.5					0.18	0.50
	Thioglycolic Acid	68-11-1	kg/yr			0.23	0.66			0.47	1.35
	Trichloroacetic Acid	76-03-9	kg/yr	4.9	14.0			0.53	1.50	0.21	0.60
	Xylene (o-,m-,p-Isomers)	1330-20-7	kg/yr	0.2	0.4						
	Zinc Chloride Fume	7646-85-7	kg/yr	0.4	1.2						

Table A-3. High Explosive Processing Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
High Explosive Processing	Acetic Acid	64-19-7	kg/yr	14.7	42.0						
	Acetone	67-64-1	kg/yr	66.4	189.8	3.32	9.50	113.08	323.07	66.63	190.37
	Acetonitrile	75-05-8	kg/yr	16.2	46.3						
	Acetylene	74-86-2	kg/yr	7.7	22.0						
	Carbon Black	1333-86-4	kg/yr	0.4	1.0						
	Chlorodifluoromethane	74-45-6	kg/yr	168.3	480.8						
	Chloroform	67-66-3	kg/yr	1.0	3.0					0.52	1.48
	Chromic acids and chromates	1333-82-0	kg/yr	0.2	0.5						
	Copper	7440-50-8	kg/yr	0.0	0.5						
	Cyclohexane	110-82-7	kg/yr	0.1	0.4						
	Cyclohexanone	108-94-1	kg/yr	0.3	0.9						
	Dichlorodifluoromethane	75-71-8	kg/yr	0.1	0.2						
	Ethanol	64-17-5	kg/yr	174.6	498.7	0.83	2.37	60.22	172.06	0.60	1.72
	Ethyl Acetate	141-78-6	kg/yr					65.92	188.34		
	Ethyl Ether	60-29-7	kg/yr	1.5	4.2						
	Ethylene Dichloride	107-06-2	kg/yr	8.6	24.7			0.43	1.24		
	Fluorine	7782-41-4	kg/yr					2.52	7.20		
	Hexane (other isomers)* or n-Hexane	110-54-3	kg/yr					0.12	0.33		
	Hydrogen Chloride	7647-01-0	kg/yr	11.9	34.1	9.58	27.36	6.23	17.81		
	Hydrogen Fluoride, as F	7664-39-3	kg/yr	0.2	0.4						
	Hydrogen Peroxide	7722-84-1	kg/yr	15.8	45.0						
	Isobutyl Alcohol	78-83-1	kg/yr					0.53	1.52		
	Isopropyl Alcohol	67-63-0	kg/yr	5.5	15.6	5.51	15.74	2.20	6.28	4.40	12.57
	Lead, el. and compounds, as Pb	7439-92-1	kg/yr					0.05	4.54		
	Mercury, numerous forms	7439-97-6	kg/yr	0.3	29.0						
	Methyl Alcohol	67-56-1	kg/yr	37.3	106.4						
	Methyl Cyclohexane	108-87-2	kg/yr	0.3	0.8						

Table A-3. High Explosive Processing Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Methyl Ethyl Ketone (MEK)	78-93-3	kg/yr	169.7	484.9			33.83	96.65		
	Methylene Chloride	75-09-2	kg/yr	7.4	21.2						
	n,n-Dimethylformamide	68-12-2	kg/yr	4.0	11.4						
	Nitric Oxide	10102-43-9	kg/yr	2.7	7.6					5.84	16.68
	Nitrous Oxide	10024-97-2	kg/yr	3.9	11.1						
	Pentane (all isomers)	109-66-0	kg/yr					0.18	0.50		
	Phenol	108-95-2	kg/yr	0.4	1.0						
	Phosphoric Acid	7664-38-3	kg/yr			9.65	27.57				
	Potassium Hydroxide	1310-58-3	kg/yr							0.18	0.50
	Propane	74-98-6	kg/yr	0.0	4396.2			0.00	86.41	0.00	170.60
	Propyl Alcohol	71-23-8	kg/yr	1.4	4.0						
	Silver (metal dust and soluble comp., as Ag)	7440-22-4	kg/yr	0.1	6.2						
	Stoddard Solvent	8052-41-3	kg/yr							1.08	3.08
	Sulfur Hexafluoride	2551-62-4	kg/yr	1.6	4.6						
	Sulfuric Acid	7664-93-9	kg/yr	2.6	7.4						
	Tetrahydrofuran	109-99-9	kg/yr	21.5	61.4			0.16	0.44	14.32	40.90
	Thionyl Chloride	7719-09-7	kg/yr	0.2	0.5						
	Toluene	108-88-3	kg/yr	5.3	15.1	0.61	1.74			9.71	27.74
	Tungsten as W insoluble Compounds	7440-33-7	kg/yr					0.96	96.07	0.01	0.50
	Turpentine	8006-64-2	kg/yr	1.1	3.2						
	VM and P Naptha	8032-32-4	kg/yr					0.50	1.42		
	Xylene (o-,m-,p-Isomers)	1330-20-7	kg/yr	0.3	0.8						
	Zinc Oxide Fume	1314-13-2	kg/yr	0.8	2.3						

Table A-4. High Explosive Testing Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
High Explosive Testing	2-Ethoxyethanol (EGEE)	110-80-5	kg/yr			0.33	0.93				
	Acetone	67-64-1	kg/yr	0.8	2.4	5.26	15.04	7.19	20.54	2.76	7.90
	Acetylene	74-86-2	kg/yr	2.8	7.9						
	Diethylene Triamine	111-40-0	kg/yr			0.34	0.96				
	Ethanol	64-17-5	kg/yr	2.2	6.3					11.74	33.55
	Ethyl Acetate	141-78-6	kg/yr			1.26	3.61				
	Hydrogen Peroxide	7722-84-1	kg/yr							23.02	65.77
	Iron Oxide Fume, as Fe	1309-37-1	kg/yr					1.05	3.00		
	Kerosene	8008-20-6	kg/yr							0.84	2.40
	Methyl Alcohol	67-56-1	kg/yr	1.1	3.2	2.22	6.34	3.88	11.08		
	Methyl n-Amyl Ketone	110-43-0	kg/yr					0.57	1.64		
	Methyl Ethyl Ketone (MEK)	78-93-3	kg/yr	0.3	0.8						
	Methylene Chloride	75-09-2	kg/yr	0.5	1.3						
	Nitromethane	75-52-5	kg/yr	0.1	0.2						
	Paraffin Wax Fume	8002-74-2	kg/yr					0.35	1.00		
	Propane	74-98-6	kg/yr	0.0	296.9			0.00	53.18		
	Stoddard Solvent	8052-41-3	kg/yr	0.3	0.7						
	Sulfur Hexafluoride	2551-62-4	kg/yr			146.36	418.18				

Table A-5. LANSCE Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
LANSCE	1,1,1-Trichloroethane	71-55-6	kg/yr	97.8	279.4						
	1,1,2-Trichloroethane	79-00-5	kg/yr			8.09	23.11				
	1,4-Dioxane	123-91-1	kg/yr							0.36	1.03
	2-Butoxyethanol	111-76-2	kg/yr	0.2	0.5						
	Acetic Acid	64-19-7	kg/yr					0.18	0.52		
	Acetic Anhydride	108-24-7	kg/yr					0.95	2.71		
	Acetone	67-64-1	kg/yr	177.0	505.6	3.74	10.69	64.42	184.05	8.85	25.28
	Acetonitrile	75-05-8	kg/yr					0.27	0.79		
	Acetylene	74-86-2	kg/yr	736.5	2104.4	0.00	1.32	0.12	0.33	0.00	2.63
	Ammonium Chloride (Fume)	12125-02-9	kg/yr					0.18	0.50		
	Benzene	71-43-2	kg/yr	0.3	0.9						
	Carbon Disulfide	75-15-0	kg/yr	0.4	1.3						
	Carbon Tetrachloride	56-23-5	kg/yr	3.3	9.6						
	Chlorodifluoromethane	74-45-6	kg/yr	8440.3	24115.2			41.28	117.94		
	Chloroform	67-66-3	kg/yr			3.64	10.40	2.60	7.42	2.65	7.56
	Cyclohexane	110-82-7	kg/yr	0.3	0.8						
	Dichlorodifluoromethane	75-71-8	kg/yr	1.5	4.4						
	Diethanolamine	111-42-2	kg/yr	0.2	0.5						
	Ethanol	64-17-5	kg/yr	197.9	565.4	61.47	175.62	12.96	37.04	2.49	7.10
	Ethyl Bromide	74-96-4	kg/yr			0.26	0.73	0.26	0.73		
	Ethylene Dichloride	107-06-2	kg/yr	0.4	1.1						
	Ethyl Ether	60-29-7	kg/yr			0.25	0.70	0.98	2.80		
	Hydrogen Chloride	7647-01-0	kg/yr					2.44	6.98	1.87	5.34
	Hydrogen Fluoride, as F	7664-39-3	kg/yr			0.16	0.45	1.21	3.45		
	Hydrogen Peroxide	7722-84-1	kg/yr					0.25	0.70		
	Hydroquinone	67-63-0	kg/yr					0.18	0.50		
	Iron Oxide Fume, as FE	1309-37-1	kg/yr	0.2	0.5						
	Isobutane	75-28-5	kg/yr	19.2	55.0						
	Isopropyl Alcohol	67-63-0	kg/yr	7.3	20.8	2.48	7.08	4.40	12.57	3.54	10.13
	Kerosene	8008-20-6	kg/yr					2.24	6.40		

Table A-5. LANSCE Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Lead, el.& inorg.compounds, as Pb	7439-92-1	kg/yr					0.01	0.50	0.00	0.45
	Mercury, numerous forms	7439-97-6	kg/yr	26.1	2612.7	1.60	159.55	1.36	136.08		
	Methyl Alcohol	67-56-1	kg/yr	3.6	10.3	2.50	7.14	5.40	15.43	4.32	12.35
	Methyl Formate	107-31-3	kg/yr					0.35	1.00		
	Methylene Chloride	75-09-2	kg/yr	0.5	1.3						
	n-Butyl Acetate	123-86-4	kg/yr	0.2	0.4						
	n,n-Dimethylformamide	68-12-2	kg/yr							0.33	0.95
	Naphtalene	91-20-3	kg/yr							0.09	0.25
	Nitric Acid	7697-37-2	kg/yr					16.47	47.04		
	Nitrobenzene	98-95-3	kg/yr							0.21	0.60
	Phosphoric Acid	7664-38-2	kg/yr	0.3	0.9					0.64	1.83
	Potassium Hydroxide	1310-58-3	kg/yr	0.2	0.5	2.12	6.05			0.88	2.50
	Propane	74-98-6	kg/yr	0.0	3797.7	0.00	497.34	0.00	810.92	0.00	560.55
	Pyridine	110-86-1	kg/yr							0.33	0.93
	Silver (metal dust and soluble comp., as Ag)	7440-22-4	kg/yr	0.0	0.5						
	Sulfur Hexafluoride	2551-62-4	kg/yr	0.2	0.7						
	Sulfuric Acid	7664-93-9	kg/yr	1.9	5.5			0.32	0.92	0.18	0.50
	Tetrachlorethylene	127-18-4	kg/yr							4.54	12.98
	Tetrahydrofuran	109-99-9	kg/yr					0.31	0.89	0.31	0.89
	Toluene	108-88-3	kg/yr	0.2	0.4	0.43	1.24	6.99	19.98		
	Trichloroacetic Acid	76-03-9	kg/yr			0.09	0.25				
	Trichloroethylene	79-01-6	kg/yr			0.24	0.69				
	Tungsten as W insoluble Compounds	7440-33-7	kg/yr	7.3	732.5						
	Zinc Chloride Fume	7646-85-7	kg/yr					0.18	0.50		
	Zinc Chromate, as Cr		kg/yr	0.4	1.1						

Table A-6. Machine Shops Air Emission

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
Machine Shops	Chlorodifluoromethane	75-45-6	kg/yr					52.39	149.69		
	Ethanol	64-17-5	kg/yr					1.57	4.48	0.13	0.37
	Isopropyl Alcohol	67-63-0	kg/yr	1.1	3.1						
	Nitric Acid	7697-37-2	kg/yr							1.34	3.82
	Propane	74-98-6	kg/yr	0.0	593.8	0.00	244.23			0.00	341.21

Table A-7. Materials Science Laboratory Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
MSL	1,1,2,2-Tetrachloroethane	630-20-6	kg/yr	1.1	3.2						
	1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	kg/yr	0.5	1.6						
	1,1,2-Trichloroethane	79-00-5	kg/yr					0.50	1.44		
	2-Methoxyethanol (EGME)	109-86-4	kg/yr	0.7	1.9						
	Acetic Acid	64-19-7	kg/yr	0.2	0.5	0.18	0.53				
	Acetone	67-64-1	kg/yr	3.6	10.3	9.14	26.12	8.43	24.09	12.72	36.34
	Acetonitrile	75-05-8	kg/yr							1.10	3.14
	Aluminum numerous forms	7429-90-5	kg/yr	0.0	2.2					0.01	0.60
	Ammonia	7664-41-7	kg/yr	0.1	0.3						
	Benzene	71-43-2	kg/yr	0.3	0.9						
	Biphenyl	92-52-4	kg/yr	0.4	1.0						
	Chlorobenzene	108-90-7	kg/yr	1.5	4.4						
	Chloroform	67-66-3	kg/yr	1.0	3.0	0.52	1.49			0.52	1.48
	Copper	7440-50-8	kg/yr	0.1	6.8						
	Cyclohexane	110-82-7	kg/yr							0.27	0.78
	Diethylene Triamine	111-40-0	kg/yr	0.2	0.5						
	Ethanol	64-17-5	kg/yr	4.0	11.3	2.21	6.33				
	Ethyl Acetate	141-78-6	kg/yr	1.3	3.6						
	Ethylene Chlorohydrin	107-07-3	kg/yr	0.1	0.3						
	Ethyl Ether	60-29-7	kg/yr			0.25	0.70			0.25	0.70
	Ethylene Diamine	107-15-3	kg/yr							2.52	7.20
	Hydrogen Bromide	10035-10-6	kg/yr	0.2	0.5						
	Hydrogen Chloride	7647-01-0	kg/yr	0.6	1.8			2.08	5.94	4.99	14.24
	Hydrogen Fluoride, as F	7664-39-3	kg/yr	0.2	0.7	0.18	0.50				
	Hydrogen Peroxide	7722-84-1	kg/yr	0.5	1.4	0.25	0.70	0.98	2.81		
	Isobutyl Alcohol	78-83-1	kg/yr			0.28	0.80				
	Isophorone Diisocyanate	4098-71-9	kg/yr			0.09	0.26				
	Isopropyl Alcohol	67-63-0	kg/yr	4.4	12.6	1.38	3.94	3.30	9.43	4.40	12.57
	Kerosene	8008-20-6	kg/yr					1.06	3.03		

Table A-7. Materials Science Laboratory Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Methyl Alcohol	67-56-1	kg/yr	3.3	9.5	6.94	19.83	7.76	22.16	6.65	18.99
	Methyl Methacrylate	80-62-6	kg/yr			0.17	0.47				
	Methylene Chloride	75-09-2	kg/yr	0.5	1.3	1.86	5.32			0.46	1.33
	Molybdenum	7439-98-7	kg/yr	0.0	0.5					0.42	1.20
	n,n-Dimethylformamide	68-12-2	kg/yr	0.2	0.5	0.25	0.71			0.38	1.09
	n-Butyl Acetate	123-86-4	kg/yr	0.2	0.4						
	n-Butyl Alcohol	71-36-3	kg/yr	0.3	0.8						
	Nickel, metal (dust) or Soluble & Inorganic Comp.	7440-02-0	kg/yr							1.56	4.47
	Nitric Acid	7697-37-2	kg/yr							7.74	22.13
	Phenol	108-95-2	kg/yr	0.2	0.5						
	Phosphoric Acid	7664-38-2	kg/yr			0.64	1.84				
	Phosphorus Oxychloride	10025-87-3	kg/yr	0.1	0.3						
	Potassium Hydroxide	1310-58-3	kg/yr	3.5	10.0						
	Propane	74-98-6	kg/yr					0.00	24.37		
	Pyridine	110-86-1	kg/yr	0.7	1.9						
	Silica, Quartz	14808-60-7	kg/yr	1.3	3.6						
	Silver (metal dust & soluble comp., as Ag)	7440-22-4	kg/yr	0.0	0.8			0.88	2.50	0.18	0.51
	Styrene	100-42-5	kg/yr	0.3	0.9						
	Sulfuric Acid	7664-93-9	kg/yr	2.6	7.4	3.23	9.22	1.61	4.60		
	Tert-Butyl Alcohol	75-65-0	kg/yr	0.3	0.8						
	Tetrahydrofuran	109-99-9	kg/yr			1.87	5.35				
	Toulene-2,4-diisocyanate (TDI)	584-84-9	kg/yr	0.6	1.6						
	Trichloroethylene	79-01-6	kg/yr			0.26	0.73				
	Vanadium, Respirable Dust and Fume	1314-62-1	kg/yr	0.0	0.5						
	Zinc Chloride Fume	7646-85-7	kg/yr	0.4	1.0						
	Zirconium Compounds, as Zr	7440-67-7	kg/yr	0.0	0.3						

Table A-8. Pajarito Site Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
Pajarito Site	Ethanol	64-17-5	kg/yr	0.1	0.4						
	Isopropyl Alcohol	67-63-0	kg/yr	1.6	4.7	1.65	4.72			1.65	4.71
	Magnesium Oxide Fume	1309-48-4	kg/yr	15.9	45.4						
	Phenylphosphine	638-21-1	kg/yr	6.6	18.9						
	Propane	74-98-6	kg/yr	0.0	1050.2	0.00	293.07	0.00	250.37	0.00	292.46
	Xylene (o-,m-,p-Isomers)	1330-20-7	kg/yr	0.3	0.8						

Table A-9. Plutonium Facility Complex Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
Plutonium Facility Complex	1,1,2-Trichloro-1,2,2-Trichloroethane	76-13-1	kg/yr					8.76	25.02		
	2-Ethoxyethanol (EGEE)	110-80-5	kg/yr					0.33	0.93	0.33	0.93
	Acetone	67-64-1	kg/yr							0.55	1.58
	Acetic Acid	64-19-7	kg/yr	14.7	42.0	0.92	2.63	0.18	0.52		
	Acetylene	74-86-2	kg/yr	2.8	7.9	0.00	1.32			0.00	7.89
	Chlorine	7782-50-5	kg/yr			23.86	68.18	12.70	36.29		
	Chloroform	67-66-3	kg/yr					2.60	7.42		
	Diacetone Alcohol	123-42-2	kg/yr					3.73	10.66		
	Diethylene Triamine	111-40-0	kg/yr					0.67	1.92		
	Ethanol	64-17-5	kg/yr	59.0	168.6	64.74	184.98	6.27	17.93		
	Hexane (other isomers)* or n-Hexane	110-54-3	kg/yr					0.92	2.64		
	Hydrogen Chloride	7647-01-0	kg/yr	311.6	890.3	225.23	643.52	282.72	807.77	287.91	822.60
	Hydrogen Fluoride, as F	7664-39-3	kg/yr			2.08	5.95	0.43	1.23	0.95	2.72
	Hydrogen Peroxide	7722-84-1	kg/yr	45.5	130.1	13.07	37.36			23.93	68.37
	Iron Oxide, as Fe	1309-37-1	kg/yr	0.1	0.3						
	Isopropyl Alcohol	67-63-0	kg/yr			1.10	3.15				
	Magnesium Oxide Fume	1309-48-4	kg/yr							0.18	0.50
	Manganese Dust and Compounds or Fume	7439-96-5	kg/yr			0.25	0.72				
	Methyl 2-Cyanoacrylate	137-05-3	kg/yr	0.5	1.5	0.54	1.53				
	Methyl Alcohol	67-56-1	kg/yr			4.44	12.69	2.49	7.12	0.28	0.79
	Methyl Ethyl Ketone (MEK)	78-93-3	kg/yr	5.3	15.2						
	n,n-Dimethylformamide	68-12-2	kg/yr	1.3	3.8			3.32	9.49	2.03	5.79
	n-Heptane	142-82-5	kg/yr					1.20	3.42		
	Nitric Acid	7697-37-2	kg/yr			13.38	38.23	15.76	45.02	284.20	812.00
	Oxalic Acid	144-62-7	kg/yr							1.40	4.00
	Phosphoric Acid	7664-38-2	kg/yr			0.32	0.92	1.60	4.59		

Table A-9. Plutonium Facility Complex Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Potassium Hydroxide	1310-58-3	kg/yr	245.5	701.5	125.05	357.29	262.64	750.39		
	Propane	74-98-6	kg/yr			0.00	48.85	0.00	77.55		
	Silica, Quartz	14808-60-7	kg/yr							0.35	1.00
	Sulfuric Acid	7664-93-9	kg/yr	36.7	104.9	0.32	0.92	2.25	6.44	0.64	1.84
	Tetrahydrofuran	109-99-9	kg/yr					0.31	0.89		
	Tetrasodium Pyrophosphate	7722-88-5	kg/yr							0.18	0.50
	Tributyl Phosphate	126-73-8	kg/yr			1.36	3.90	1.36	3.89		
	Trichloroethylene	79-01-6	kg/yr	114.9	328.3	106.92	305.48			106.70	304.85
	Vanadium, Respirable Dust & Fume	1314-62-1	kg/yr							0.09	0.25
	Zinc Chloride Fume	7646-85-7	kg/yr					0.70	2.00	0.53	1.50

Table A-10. Radiochemistry Site Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
Radio-chemistry Site	1,1,1-Trichloroethane	71-55-6	kg/yr	2.3	6.7			1.87	5.36		
	1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	kg/yr	2.2	6.3	4.94	14.10				
	1,3,5-Trimethylbenzene	108-67-8	kg/yr	0.2	0.5						
	1,3-Butadiene	106-99-0	kg/yr	5.3	15.0						
	1,4-Dioxane	123-91-1	kg/yr	0.4	1.0	0.36	1.04			0.98	2.79
	2-Methoxyethanol (EGME)	109-86-4	kg/yr	0.2	0.5	0.34	0.97	0.51	1.45	0.17	0.48
	Acetic Acid	64-19-7	kg/yr	1.9	5.5	0.91	2.60	0.18	0.52	0.73	2.10
	Acetic Anhydride	108-24-7	kg/yr	0.8	2.2			0.54	1.54	0.19	0.54
	Acetone	67-64-1	kg/yr	90.9	259.8	62.47	178.50	55.85	159.56	94.40	269.70
	Acetonitrile	75-05-8	kg/yr			6.07	17.35	4.78	13.67	10.19	29.11
	Acrylic Acid	79-10-7	kg/yr					0.10	0.28		
	Aluminum numerous forms	7429-90-5	kg/yr			0.00	0.27	0.08	7.57		
	Ammonia	7664-41-7	kg/yr							11.90	34.00
	Ammonium Chloride (Fume)	12125-02-9	kg/yr	0.8	2.3	0.18	0.50			1.07	3.05
	Arsenic, el. and inorg., exc. Arsine, as As	7440-38-2	kg/yr	0.4	1.1			0.20	0.56		
	Benzene	71-43-2	kg/yr	0.8	2.2	0.38	1.08	1.33	3.79	0.34	0.96
	Benzyl Chloride	100-44-7	kg/yr	0.2	0.5						
	Beryllium	7440-41-7	kg/yr			0.33	0.94	0.13	0.38		
	Bromine	7726-95-6	kg/yr	0.3	0.8	0.08	0.23			0.50	1.44
	Cadmium, el. and compounds, as Cd	7440-43-9	kg/yr					0.31	0.87		
	Carbon Tetrachloride	56-23-5	kg/yr	64.5	184.2	1.12	3.19			1.67	4.78
	Chlorine	7782-50-5	kg/yr	0.3	0.9					0.16	0.45
	Chlorobenzene	108-90-7	kg/yr					0.19	0.55		
	Chlorodifluoromethane	75-45-6	kg/yr					63.50	181.44		
	Chloroform	67-66-3	kg/yr	5.5	15.6	4.16	11.89	0.13	0.37	8.59	24.55
	Chromium, Metal and Cr III Compounds, as Cr	7440-47-3	kg/yr	0.3	0.7						

Table A-10. Radiochemistry Site Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Cobalt, elemental and inorg. Comp., as Co	7440-48-4	kg/yr	0.3	0.9	0.02	1.79				
	Copper	7440-50-8	kg/yr			0.02	2.28	0.01	0.90		
	Cyclohexanol	108-93-0	kg/yr			0.34	0.96			0.34	0.96
	Cyclohexanone	108-94-1	kg/yr					0.83	2.37		
	Cyclohexylamine	108-91-8	kg/yr	0.3	0.8						
	Dichlorodifluoromethane	75-71-8	kg/yr							0.34	0.96
	Dicyclopentadiene	77-73-6	kg/yr			0.86	2.45				
	Diethanolamine	111-42-2	kg/yr	2.3	6.7						
	Diethylamine	109-89-7	kg/yr	0.5	1.5	0.25	0.70			0.25	0.70
	Dimethyl Amine	124-40-3	kg/yr							0.48	1.38
	Dimethyl Sulfate	77-78-1	kg/yr							0.23	0.67
	Ethanol	64-17-5	kg/yr	10.0	28.6	4.71	13.45	0.55	1.58	7.15	20.42
	Ethyl Acetate	141-78-6	kg/yr	8.8	25.2	0.32	0.90	2.52	7.20	5.36	15.31
	Ethyl Bromide	74-96-4	kg/yr					0.26	0.73	0.42	1.20
	Ethyl Chloride	75-00-3	kg/yr	0.4	1.0						
	Ethyl Ether	60-29-7	kg/yr	4.4	12.6	14.12	40.33	27.93	79.80	19.67	56.21
	Ethylamine	75-04-7	kg/yr							0.12	0.35
	Ethylene Diamine	107-15-3	kg/yr	0.2	0.5						
	Ethylene Dichloride	107-06-2	kg/yr	0.9	2.5						
	Furfural	98-01-1	kg/yr	0.2	0.6						
	Hexafluoroacetone	684-16-2	kg/yr	0.3	0.7						
	Hexane (other isomers)* or n-Hexane	110-54-3	kg/yr	11.2	32.0	7.90	22.56	2.31	6.60	3.93	11.23
	Hydrogen Bromide	10035-10-6	kg/yr	4.3	12.3	12.10	34.57	11.42	32.63	4.54	12.98
	Hydrogen Chloride	7647-01-0	kg/yr	211.8	605.0	88.30	252.29	176.67	504.78	92.58	264.52
	Hydrogen Fluoride, as F	7664-39-3	kg/yr	3.2	9.0	1.59	4.55	0.90	2.57	2.49	7.12
	Hydrogen Peroxide	7722-84-1	kg/yr	11.6	33.1	5.94	16.98	7.04	20.12	15.02	42.91
	Hydrogen Sulfide	7783-06-4	kg/yr			0.16	0.45			3.67	10.48
	Indene	95-13-6	kg/yr	0.1	0.3						

Table A-10. Radiochemistry Site Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Indium & compounds, as In	7440-74-6	kg/yr							0.18	0.50
	Iron Oxide Fume, as Fe	1309-37-1	kg/yr	0.4	1.0						
	Isobutyl Alcohol	78-83-1	kg/yr					0.14	0.40		
	Isopropyl Alcohol	67-63-0	kg/yr	8.0	22.8	14.70	42.00	7.97	22.78	10.12	28.92
	Isopropyl Ether	108-20-3	kg/yr	0.1	0.3	1.02	2.90				
	Kerosene	8008-20-6	kg/yr	0.0	3.0						
	Lead, el. and inorg. Compounds, as Pb	7439-92-1	kg/yr			0.01	1.13				
	Magnesium Oxide Fume	1309-48-4	kg/yr	0.4	1.1	0.21	0.60				
	Manganese Dust & Compounds or Fume	7439-96-5	kg/yr							0.09	0.25
	Mercury numerous forms	7439-97-6	kg/yr	0.0	0.5					0.01	0.50
	Methyl Alcohol	67-56-1	kg/yr	11.1	31.7	7.91	22.60	11.63	33.24	8.86	25.33
	Methyl Cyclohexane	108-87-2	kg/yr			0.28	0.80				
	Methylene Chloride	75-09-2	kg/yr			13.82	39.48			35.11	100.33
	Methyl Ethyl Ketone (MEK)	78-93-3	kg/yr	0.3	0.8						
	Methyl Formate	107-31-3	kg/yr	0.4	1.0						
	Methyl Iodide	74-88-4	kg/yr	0.4	1.0			0.14	0.40		
	Methylene Chloride	75-09-2	kg/yr	13.9	39.8			8.85	25.30		
	Molybdenum	7439-98-7	kg/yr	0.0	1.0			11.83	33.81		
	Morpholine	110-91-8	kg/yr			0.35	1.00				
	n,n-Dimethyl Acetamide or Dimethyl Acetamide	127-19-5	kg/yr			0.66	1.89			0.33	0.94
	n,n-Dimethylformamide	68-12-2	kg/yr	1.0	2.8	1.00	2.85	0.70	1.99	0.33	0.95
	n-Butyl Alcohol	71-36-3	kg/yr			0.14	0.41	0.28	0.81		
	n-Heptane	142-82-5	kg/yr			1.92	5.48	0.48	1.37	1.37	3.92
	Nitric Acid	7697-37-2	kg/yr			450.78	1287.93	623.41	1781.17	528.82	1510.92
	Nitric Oxide	10102-43-9	kg/yr	1.5	4.2						
	Nitromethane	75-52-5	kg/yr	0.2	0.6			0.20	0.57		
	Nitrous Oxide	10024-97-0	kg/yr	0.1	0.2			0.08	0.23		
	o-Dichlorobenzene	95-50-1	kg/yr			0.23	0.65	0.91	2.61		

Table A-10. Radiochemistry Site Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	p-Phenylene diamine	106-50-3	kg/yr	0.2	0.5						
	p-Toluidine	106-49-0	kg/yr							0.18	0.50
	Pentane (all isomers)	109-66-0	kg/yr	0.9	2.5	0.22	0.63	1.53	4.38	0.66	1.88
	Phenylhydrazine	100-63-0	kg/yr							0.18	0.50
	Phosphoric Acid	7664-38-2	kg/yr	2.6	7.3	3.22	9.19	609.71	1742.03	3.85	11.00
	Phosphorus Oxychloride	10025-87-3	kg/yr							0.09	0.25
	Phosphorus Trichloride	7719-12-2	kg/yr	0.1	0.3			0.09	0.25	0.53	1.50
	Potassium Hydroxide	1310-58-3	kg/yr	1.7	4.7					4.38	12.50
	Propane	74-98-6	kg/yr	0.0	1769.7			0.00	2663.99	0.00	1521.40
	Propionic Acid	79-09-4	kg/yr							0.49	1.39
	Propyl Alcohol	71-23-8	kg/yr							0.28	0.81
	Pyridine	110-86-1	kg/yr	0.8	2.4			0.20	0.56	1.14	3.26
	Silica, Quartz	14808-60-7	kg/yr					1.09	3.10		
	Silver (metal dust and soluble comp., as Ag)	7440-22-4	kg/yr	0.0	0.4			0.74	2.11		
	Sulfur Hexafluoride	2551-62-4	kg/yr					2.06	5.90		
	Sulfuric Acid	7664-93-9	kg/yr	12.2	35.0			3.38	9.66	5.80	16.56
	tert-Butyl Alcohol	75-65-0	kg/yr	0.1	0.4					0.28	0.79
	Tetrahydrofuran	109-99-9	kg/yr	5.6	16.0			19.98	57.09	12.20	34.87
	Thionyl Chloride	7719-09-7	kg/yr	0.7	1.9					0.80	2.28
	Tin numerous forms	7440-31-5	kg/yr							0.01	0.50
	Toluene	108-88-3	kg/yr	17.7	50.7			10.07	28.77	26.70	76.29
	Trichloroethylene	79-01-6	kg/yr	0.3	0.7						
	Triethylamine	121-44-8	kg/yr	0.8	2.3			0.41	1.16	0.42	1.20
	Trimethylamine	75-50-3	kg/yr					0.11	0.32		
	Tungsten as W insoluble Compounds	7440-33-7	kg/yr					0.23	22.68	0.02	1.94
	Uranium (natural) Sol.&Unsol.Comp. as U	7440-61-1	kg/yr	0.7	1.9					1.33	3.80
	VM & P Naphtha	8032-32-4	kg/yr					5.78	16.50	6.83	19.50
	Vinyl Acetate	108-05-4	kg/yr	0.3	0.9						

Table A-10. Radiochemistry Site Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Yttrium	7440-65-5	kg/yr					0.31	0.89		
	Zinc Chloride Fume	7646-85-7	kg/yr					0.09	0.25		
	Zirconium Compounds, as Zr	7440-67-7	kg/yr					0.01	1.30		

Table A-11. Sigma Complex Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
Sigma Complex	2-Butoxyethanol	111-76-2	kg/yr	1.3	3.6						
	Acetone	67-64-1	kg/yr	8.0	22.9	4.43	12.66	6.64	18.96	7.19	20.54
	Acetylene	74-86-2	kg/yr	11.0	31.6					0.00	1.31
	Aluminum numerous forms	7429-90-5	kg/yr	0.1	11.8					0.00	0.27
	Ammonia	7664-41-7	kg/yr	0.2	0.5						
	Cadmium, el., and compounds, as Cd	7440-43-9	kg/yr	0.0	0.5						
	Chloroform	67-66-3	kg/yr	0.3	0.7						
	Chromium, Metal and Cr III Compounds, as Cr	7440-47-3	kg/yr	0.0	4.0						
	Copper	7440-50-8	kg/yr	0.6	56.6					0.01	1.11
	Diethylene Triamine	111-40-0	kg/yr	0.7	1.9	0.67	1.92	0.67	1.92	0.67	1.92
	Ethanol	64-17-5	kg/yr	15.2	43.5			1.11	3.16		
	Ethyl Ether	60-29-7	kg/yr			0.25	0.70				
	Hydrazine	302-01-2	kg/yr	0.1	0.3						
	Hydrogen Chloride	7647-01-0	kg/yr	5.4	15.4	196.98	562.79	6.86	19.59	6.44	18.40
	Hydrogen Fluoride, as F	7664-39-3	kg/yr	64.9	185.4			25.56	73.03	85.09	243.11
	Hydrogen Peroxide	7722-84-1	kg/yr	1.3	3.7	3.21	9.16	2.26	6.47	4.92	14.07
	Isopropyl Alcohol	67-63-0	kg/yr	9.9	28.3	6.61	18.89	3.30	9.43	6.60	18.85
	Kerosene	8008-20-6	kg/yr	0.0	21.4					58.30	166.56
	Lead, el. and inorg. Compounds, as Pb	7439-92-1	kg/yr			0.05	5.01				
	Mercury numerous forms	7439-97-6	kg/yr			0.02	2.27			0.07	6.80
	Methyl Alcohol	67-56-1	kg/yr	4.6	13.1	3.33	9.52	3.60	10.29	1.11	3.17
	Methyl Ethyl Ketone (MEK)	78-93-3	kg/yr	0.3	0.8					0.14	0.40
	Methylene Chloride	75-09-2	kg/yr	0.2	0.7						
	Molybdenum	7439-98-7	kg/yr	3.9	387.1						
	n,n-Dimethylformamide	68-12-2	kg/yr			0.17	0.48				
	Nickel, metal (dust) or Soluble and Inorganic Comp.	7440-02-0	kg/yr	0.0	4.0						

Table A-11. Sigma Complex Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Nitric Acid	7697-37-2	kg/yr			272.75	779.29	63.46	181.31	35.25	100.72
	Phosphoric Acid	7664-38-2	kg/yr	234.3	669.3			82.16	234.76		
	Potassium Hydroxide	1310-58-3	kg/yr	0.8	2.3						
	Propane	74-98-6	kg/yr			0.00	73.27	0.00	387.74	0.00	194.98
	Silica, Quartz	14808-60-7	kg/yr	0.7	2.0						
	Sulfuric Acid	7664-93-9	kg/yr	25.5	72.8	9.68	27.66			8.05	23.00
	Tantalum Metal	7440-25-7	kg/yr	0.3	27.2			0.73	2.08		
	Tellurium & Compounds, as Te	13494-80-9	kg/yr							0.18	0.50
	Tin numerous forms	7440-31-5	kg/yr	0.0	1.1						
	Tungsten as W insoluble Compounds	7440-33-7	kg/yr							0.01	1.00
	Xylene (o-,m-,p-Isomers)	1330-20-7	kg/yr	1.7	4.9						
	Zinc Oxide Fume	1314-13-2	kg/yr	0.2	0.5						
	Zirconium Compounds, as Zr	7440-67-7	kg/yr	0.0	1.0	0.01	0.50	0.00	0.30		

Table A-12. Target Fabrication Facility Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
Target Fabrication Facility	1,1,1-Trichloroethane	71-55-6	kg/yr	4.9	14.1					0.23	0.67
	1,1,2-Trichloroethane	79-00-5	kg/yr	0.5	1.4						
	2-Methoxyethanol (EGME)	109-86-4	kg/yr	0.3	1.0			0.34	0.96		
	Acetic Acid	64-19-7	kg/yr							0.92	2.62
	Acetone	67-64-1	kg/yr	20.0	57.2	5.54	15.83	17.83	50.95	10.51	30.02
	Acetonitrile	75-05-8	kg/yr							0.55	1.57
	Acrylic Acid	79-10-7	kg/yr	0.2	0.6						
	Acrylonitrile	107-13-1	kg/yr	0.3	0.8						
	Aluminum numerous forms	7429-90-5	kg/yr					0.01	1.00		
	Ammonia	7664-41-7	kg/yr	1483.5	4238.6						
	Ammonium Chloride (Fume)	12125-02-9	kg/yr	0.4	1.0						
	Aniline and Homologues	62-53-3	kg/yr	0.2	0.5						
	Benzene	71-43-2	kg/yr			1.08	3.07	0.31	0.88		
	Boron Oxide	1303-86-2	kg/yr			0.35	1.00				
	Bromine	7726-95-6	kg/yr							0.32	0.90
	Chlorine	7782-50-5	kg/yr	6.9	19.7						
	Chloroform	67-66-3	kg/yr							6.28	17.95
	Cyclohexane	110-82-7	kg/yr	0.5	1.6	0.55	1.56				
	Dibutyl Phthalate	84-74-2	kg/yr	0.7	2.1						
	Diethanolamine	111-42-2	kg/yr	0.2	0.5						
	Diethyl Phthalate	84-66-2	kg/yr	0.1	0.4						
	Diethylene Triamine	111-40-0	kg/yr	0.3	1.0						
	Divinyl Benzene	1321-74-0	kg/yr			0.16	0.46	0.53	1.50	0.64	1.84
	Ethanol	64-17-5	kg/yr	9.1	25.9	1.73	4.95	3.14	8.96		
	Ethyl Acetate	141-78-6	kg/yr	1.3	3.6					1.26	3.60
	Ethyl Ether	60-29-7	kg/yr			14.73	42.09	1.47	4.20		
	Ethylene Diamine	107-15-3	kg/yr	0.2	0.4						
	Ethylene Dichloride	107-06-2	kg/yr	2.4	6.8	0.43	1.24	0.22	0.62		

Table A-12. Target Fabrication Facility Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Formic Acid	64-18-6	kg/yr							0.32	0.92
	Hexane (other isomers)* or n-Hexane	110-54-3	kg/yr			0.46	1.32	0.49	1.39	1.85	5.28
	Hydrogen Chloride	7647-01-0	kg/yr	3.9	11.0			0.10	0.30		
	Hydrogen Fluoride, as F	7664-39-3	kg/yr	0.3	1.0					0.32	0.91
	Hydrogen Peroxide	7722-84-1	kg/yr	0.2	0.7					1.72	4.92
	Isopropyl Alcohol	67-63-0	kg/yr	6.9	19.6	9.92	28.34	11.00	31.42	14.30	40.85
	Mercury numerous forms	7439-97-6	kg/yr							0.09	8.54
	Methyl Alcohol	67-56-1	kg/yr	12.1	34.7	14.43	41.24	18.84	53.82	6.65	18.99
	Methyl Cyclohexane	108-87-2	kg/yr	0.3	0.8						
	Methyl Ethyl Ketone (MEK)	78-93-3	kg/yr			2.26	6.46	2.26	6.44	1.13	3.22
	Methyl Isobutyl Ketone	108-10-1	kg/yr	0.1	0.4						
	Methyl Methacrylate	80-62-6	kg/yr							0.33	0.94
	Methylene Bisphenyl Isocyanate (MDI)	101-68-8	kg/yr					0.18	0.50		
	Methylene Chloride	75-09-2	kg/yr	1.9	5.3					0.98	2.79
	Morpholine	110-91-8	kg/yr			0.35	1.00				
	n,n-Dimethyl Acetamide or Dimethyl Acetamide	127-19-5	kg/yr	0.3	0.9					0.99	2.83
	n,n-Dimethylformamide	68-12-2	kg/yr	12.3	35.1	6.65	19.01	10.63	30.36	6.64	18.97
	n-Amyl Acetate	628-63-7	kg/yr	0.3	0.9						
	n-Butyl Acetate	123-86-4	kg/yr	0.2	0.4					0.61	1.75
	n-Heptane	142-82-5	kg/yr	1.0	2.7						
	Nickel, metal (dust) or Soluble & Inorganic Comp.	7440-02-0	kg/yr							1.56	4.45
	Nitric Acid	7697-37-2	kg/yr			4.55	13.00	25.10	71.72	2.94	8.39
	Nitrous Oxide	10024-97-2	kg/yr	19.3	55.0						
	o-Dichlorobenzene	95-50-1	kg/yr					1.00	2.87		
	Osmium Tetroxide, as Os	20816-12-0	kg/yr	0.1	0.2						
	Pentane (all isomers)	109-66-0	kg/yr			0.44	1.26				
	Phosphoric Acid	7664-38-2	kg/yr	0.4	1.0						

Table A-12. Target Fabrication Facility Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Phosphorus Pentachloride	10026-13-8	kg/yr							0.42	1.20
	Potassium Hydroxide	1310-58-3	kg/yr	0.4	1.0			2.29	6.54	5.45	15.58
	Propane	74-98-6	kg/yr	0.0	45.4						
	Propyl Alcohol	71-23-8	kg/yr	0.3	0.8	0.14	0.40				
	Pyridine	110-86-1	kg/yr					0.33	0.93		
	Silica, Quartz	14808-60-7	kg/yr							0.35	1.00
	Silicon Tetrahydride	7803-62-5	kg/yr	3.1	8.9						
	Styrene	100-42-5	kg/yr	1.7	4.9			1.90	5.44		
	Sulfur Hexafluoride	2551-62-4	kg/yr	9.7	27.7						
	Sulfuric Acid	7664-93-9	kg/yr	4.8	13.8	69.38	198.22	1.42	4.05		
	Tert-Butyl Alcohol	75-65-0	kg/yr			0.28	0.79				
	Tetrahydrofuran	109-99-9	kg/yr	0.3	0.9	1.25	3.56	1.56	4.45		
	Toluene	108-88-3	kg/yr	1.2	3.5					1.22	3.49
	Triethylamine	121-44-8	kg/yr							0.25	0.73
	Tungsten as W insoluble Compounds	7440-33-7	kg/yr			0.01	0.50				
	VM & P Naphtha	8032-32-4	kg/yr			0.53	1.50			0.53	1.50
	Xylene (o-,m-,p-Isomers)	1330-20-7	kg/yr			0.91	2.59				

Table A-13. Tritium Operations Air Emissions

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
Tritium Operations	Ammonia	7664-41-7	kg/yr	0.8	2.4						
	Copper	7440-50-8	kg/yr	0.0	0.5						
	Ethanol	64-17-5	kg/yr	0.3	0.7			0.28	0.79	0.52	1.49
	Hydrogen Chloride	7647-01-0	kg/yr	0.4	1.2						
	Methyl Alcohol	67-56-1	kg/yr	0.3	0.8						
	Phenylphosphine	638-21-1	kg/yr	0.3	0.9						
	Propane	74-98-6	kg/yr	0.0	73.4	0.00	97.69	0.00	73.12	0.00	48.74
	Sulfur Hexafluoride	2551-62-4	kg/yr	14.2	40.6						

Table A-14. Waste Management Operations Air Emissions (continued)

KEY FACILITY	CHEMICAL NAME	CAS NUMBER	UNITS	1999 ESTIMATED AIR EMISSIONS	1999 USAGE	2000 ESTIMATED AIR EMISSIONS	2000 USAGE	2001 ESTIMATED AIR EMISSIONS	2001 USAGE	2002 ESTIMATED AIR EMISSIONS	2002 USAGE
	Molybdenum	7439-98-7	kg/yr			0.36	1.02				
	Napthalene	91-20-3	kg/yr			0.18	0.50				
	Nickel, metal (dust) or Soluble and Inorganic Comp.	7440-02-0	kg/yr			0.31	0.89				
	Nitric Acid	7697-37-2	kg/yr			28.90	82.58	12.07	34.49	4.06	11.60
	Oxalic Acid	144-05-3	kg/yr	0.2	0.5						
	Phenol	108-95-2	kg/yr	0.7	2.0	0.18	0.50	0.18	0.50		
	Phosphorus	7723-14-0	kg/yr	0.2	0.6						
	Potassium Hydroxide	1310-58-3	kg/yr	3.3	9.5						
	Propane	74-98-6	kg/yr	0.0	14015.9	0.00	35.52	0.00	121.86	0.00	121.86
	Propyl Alcohol	71-23-8	kg/yr	0.1	0.4						
	Pyridine	110-86-1	kg/yr					0.33	0.93	0.33	0.93
	Selenium Compounds, as Se	7782-49-2	kg/yr			0.17	0.48				
	Silica, Quartz	14808-60-7	kg/yr	1.1	3.0						
	Silver (metal dust and soluble comp., as Ag)	7440-22-4	kg/yr	0.0	1.1						
	Stoddard Solvent	8052-41-3	kg/yr			1.02	2.92				
	Sulfuric Acid	7664-93-9	kg/yr	153.2	437.7	2.58	7.38	3.86	11.04	7.73	22.08
	Tin numerous forms	7440-31-5	kg/yr	0.0	0.7						
	Trichloroacetic Acid	76-03-9	kg/yr	0.2	0.5						
	Uranium (natural) Sol.& Unsol. Comp. as U	7440-61-1	kg/yr					0.67	1.90	0.67	1.90
	Yttrium	7440-65-5	kg/yr			0.16	0.45				
	Zinc Chloride Fume	7646-85-7	kg/yr	0.2	0.5						

Table B-1. Comparison of Nuclear Facilities Lists

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
2.1		<i>Plutonium Complex</i>											
2.1-1	TA-55-0004	Pu-238 Processing	2	Plutonium Facility	2	TA-55 Plutonium Facility	2	TA-55 Plutonium Facility	2	TA-55 Plutonium Facility	2	TA-55 Plutonium Facility	2
				Pu glovebox line; Pu-238 processing	2	Pu glovebox line; Pu-238 processing	2	Pu glovebox line; Pu-238 processing	2	Pu glovebox line; processing of isotopes of Pu	2	Pu glovebox line; processing of isotopes of Pu	2
2.1-1	TA-55-0041	Nuclear Material Storage	2										
2.2		<i>Tritium Facilities</i>											
2.2-1	TA-16-0205	WETF	2	Weapons Engineering Tritium Facility (WETF)	2	TA-16 Weapons Engineering Tritium Facility (WETF)	2	TA-16 Weapons Engineering Tritium Facility (WETF)	2	TA-16 Weapons Engineering Tritium Facility (WETF)	2	TA-16 Weapons Engineering Tritium Facility (WETF)	2
				Weapons related tritium research	2	Weapons related tritium research	2	Weapons related tritium research	2	Tritium research	2	Tritium research	2
2.2-1	TA-16-0205A	WETF	2										
2.2-1	TA-16-0450	WETF	2										
2.2-1	TA-21-0155	TSTA	2	Tritium System Test Assembly (TSTA)	2	Tritium System Test Assembly (TSTA)	2	Tritium System Test Assembly (TSTA)	2	Tritium System Test Assembly (TSTA)	2	Tritium System Test Assembly (TSTA)	2
				Tritium research; >HC-2 threshold	2	Tritium research; >HC-2 threshold	2	Tritium research	2	Stabilization and Deactivation Activities	2	Stabilization and Deactivation Activities	2
2.2-1	TA-21-0209	TSFF	2	TA-21 Tritium Science and Fabrication Facility (TSFF)	2	TA-21 Tritium Science and Fabrication Facility (TSFF)	2	TA-21 Tritium Science and Fabrication Facility (TSFF)	2	TA-21 Tritium Science and Fabrication Facility (TSFF)	2	TA-21 Tritium Science and Fabrication Facility (TSFF)	2

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
				Support for underground testing program >HC-2 threshold; tritium	2	Support for underground testing program >HC-2 threshold; tritium	2	Support for underground testing program (tritium)	2	Stabilization activities and NTTL support		Stabilization activities and NTTL support	2
2.3		<i>Chemistry and Metallurgy Research Building</i>											
2.3-1	TA-03-0019 (Building number should be -0029)	CMR	2	TA-3 Chemistry and Metallurgy Research (CMR) Bldg.	2	TA-3 Chemistry and Metallurgy Research (CMR) Bldg.	2	TA-3 Chemistry and Metallurgy Research (CMR) Bldg.	2	TA-3 Chemistry and Metallurgy Research (CMR) Bldg.	2	TA-3 Chemistry and Metallurgy Research Facility (CMR)	2
2.3-1	TA-03-0029	Radiochemistry Hot Cell		Radiochemistry Hot Cell facility	2	Radiochemistry Hot Cell facility	2	Radiochemistry Hot Cell facility	2				
										Actinide chemistry and metallurgy research and analysis	2	Actinide chemistry and metallurgy research and analysis	2
2.3-1	TA-03-0029	SNM Vault		CMR SNM Vault	2	CMR SNM Vault	2	CMR SNM Vault	2				
2.3-1	TA-03-0029	Nondestructive analysis/ nondestructive examination Waste Assay		CMR NDA/NDE waste assay; inspection of waste drums	2	CMR NDA/NDE waste assay; inspection of waste drums	2	CMR NDA/NDE waste assay; inspection of waste drums	2				
2.3-1	TA-03-0029	IAEA Classroom				Classroom for IAEA inspectors; a.k.a. "School House"	2	Classroom for IAEA inspectors; a.k.a. "School House"	2				

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
2.3-1	TA-03-0029	Wing 9 (Enriched Uranium)		Enriched Uranium foundry & machining; operation shut-down; (Wing 9)	2	Enriched Uranium foundry & machining; operation shut-down; (Wing 9)	2	Enriched Uranium foundry & machining; operation shut-down; (Wing 9)	2				
2.4		<i>Pajarito Site</i>											
2.4-1	TA-18	Site Itself		LANL Critical Experiment Facility (LACEF) and Hillside Vault	2	TA-18 LANL Critical Experiment Facility (LACEF) and Hillside Vault	2	TA-18 LANL Critical Experiment Facility (LACEF) and Hillside	2	TA-18 LANL Critical Experiment Facility and Hillside	2	TA-18 LANL Critical Experiment Facility (LACEF)	2
				Critical Experiment Site	2	Critical Experiment Site	2	Critical Experiment Site	2	Critical Experiment Site	2	Critical Experiment Site	2
2.4-1	TA-18-0023	SNM Vault (CASA 1)	2	Category 1 SNM Vault (CASA 1)	2	Category 1 SNM Vault (CASA 1)	2	Category 1 SNM Vault (CASA 1)	2	Category 1 SNM Vault (CASA 1)	2		
2.4-1	TA-18-0026	Hillside Vault	2	Hillside Vault (Pajarito Site); contains SNM>HC-2 threshold	2	Hillside Vault (Pajarito Site); contains SNM>HC-2 threshold	2	Hillside Vault (Pajarito Site); contains SNM>HC-2 threshold	2	Hillside Vault (Pajarito Site); contains SNM>HC-2 threshold	2		
2.4-1	TA-18-0032	SNM Vault (CASA 2)	2	Category 1 SNM Vault (CASA 2)	2	Category 1 SNM Vault (CASA 2)	2	Category 1 SNM Vault (CASA 2)	2	Category 1 SNM Vault (CASA 2)	2		
2.4-1	TA-18-0116	Assembly Building (CASA 3)	2	Assembly Building (CASA 3)	2	Assembly Building (CASA 3)	2	Assembly Building (CASA 3)	2	Assembly Building (CASA 3)	2		
2.4-1	TA-18-0127	Accelerator used for weapons x-ray		Accelerator used for weapons x-ray	2	Accelerator used for weapons x-ray	2	Accelerator used for weapons x-ray	2	Accelerator used for weapons x-ray	2		
2.4-1	TA-18-0129	Calibration Laboratory		Calibration laboratory	2	Calibration laboratory	2	Calibration laboratory	2	Calibration laboratory	2		
2.4-1	TA-18-0247	Sealed Sources		Sealed sources >HC-3 threshold values; not ANSI certified	3	Sealed sources >HC-3 threshold values; not ANSI certified	3						

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
2.4-1	TA-18-0258	IAEA Classroom (Trailer)		Trailer classroom for IAEA inspectors; a.k.a. "School House"	2								
2.5		<i>Sigma Complex</i>											
2.5-1	TA-03-0066	44 metric tons of depleted uranium storage	3	Storage of 44 MT DU	3	Storage of 44 MT DU	3						
2.5-1	TA-03-0159	Thorium storage	3	Storage of 239 kg thorium ingots and oxides	3		*	*					
2.6 (NA)		<i>Materials Science Laboratory</i>											
2.7 (NA)		<i>Target Fabrication Facility</i>											
2.8 (NA)		<i>Machine Shops</i>											
2.9		<i>High Explosives Processing</i>											
2.9-1								TA-8 Radiography Facility	2	TA-8 Radiography Facility	2	TA-8 Radiography Facility	2

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
	TA-08-0022	Radiography Facility	2		2	Radiography facility; radiographs of nuclear explosives assemblies and other sources exceed HC-2 threshold values	2						
	TA-08-0023	Radiography Facility	2		2	Radiography facility; radiographs of nuclear explosives assemblies and other sources exceed HC-2 threshold values	2	Betatron Building	2	Betatron Building	2	Betatron Building	2
	TA-08-0024	Isotope Building	2										
	TA-08-0070	Experimental Science	2										
	TA-16-0411	Intermediate Device Assembly			2	Intermediate Device Assembly Building	2						
2.10 (NA)		High Explosives Testing											
2.11		Los Alamos Neutron Science Center		TA-53 Nuclear Activities at LANSCE	3	TA-53 Nuclear Activities at Los Alamos Neutron Science Center (LANSCE)	3	TA-53 Nuclear Activities at Los Alamos Neutron Science Center (LANSCE)	3	TA-53 Nuclear Activities at Los Alamos Neutron Science Center (LANSCE)	3	TA-53 Nuclear Activities at Los Alamos Neutron Science Center (LANSCE)	3

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
2.11-1	TA-53-1L	Manual Lujan Neutron Scattering Center		Manual Lujan Neutron Scattering Center	3	Manual Lujan Neutron Scattering Center	3	Manual Lujan Neutron Scattering Center	3	Lujan Center Neutron Production Target	3	Lujan Center Neutron Production Target	3
	TA-53-3M	Experimental Science	3										
	TA-53-A-6	Accelerator Production of Tritium target beam stop		APT target, isotope production, beam stop	3	APT target, isotope production, beam stop	3	APT target, isotope production, beam stop	3	In-place storage DU and A-6 beam stop	3	In-place storage DU and A-6 beam stop	3
	TA-53-ER1	Actinide scattering experiment		Actinide scattering experiment	3	Actinide scattering experiment	3	TA-53 ERI Actinide scattering experiment	3	TA-53 ERI Actinide scattering experiment	3	Lujan Center ER-1/2 Actinide scattering experiment	3
	TA-53-P3E	Pion Scattering Experiment		Pion Scattering Experiment	3								
										TA-53 Target 4 WNR Neutron Production target ^b	3		
2.12 (NA)		Health Research Laboratory				Bioscience Facilities		Bioscience Facilities		Bioscience Facilities		Bioscience Facilities	
2.13		Radiochemistry Facility											
2.13-1	TA-48-0001	Radiochemistry and Hot Cell	3	TA-48 Radiochemistry and Hot Cell Facility	3	TA-48 Radiochemistry and Hot Cell Facility	3	TA-48 Radiochemistry and Hot Cell Facility	3	TA-48 Radiochemistry and Hot Cell Facility	3	TA-48 Radiochemistry and Hot Cell Facility	3

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Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
2.15-1	TA-50-0037	RAMROD		Radioactive Materials, Research, Operations, and Demonstration (RAMROD)	2	TA-50 Radio-active Materials, Research, Operations, and Demonstration (RAMROD)	2	TA-50 Radio-active Materials, Research, Operations, and Demonstration (RAMROD)	2	TA-50 Radio-active Materials, Research, Operations, and Demonstration (RAMROD)	2	TA-50 Radio-active Materials, Research, Operations, and Demonstration (RAMROD)	2
				Radioactive materials, research, operations, and demonstration facility	2	Radioactive materials, research, operations, and demonstration facility	2	Radioactive materials, research, operations, and demonstration facility	2	Radioactive materials, research, operations, and demonstration facility	2	Radioactive materials, research, operations, and demonstration facility	2
	TA-50-0069	WCRRF Building	2	TA-50 Waste Characterization, Reduction, and Repackaging Facility (WCRRF)	3	TA-50 Waste Characterization, Reduction, and Repackaging Facility (WCRRF)	2	TA-50 Waste Characterization, reduction, and Repackaging Facility (WCRRF)	2	TA-50 Waste Characterization, Reduction, and Repackaging Facility (WCRRF)	2	TA-50 Waste Characterization, Reduction, and Repackaging Facility (WCRRF)	2
				Waste characterization, reduction, and repackaging facility	3	Waste characterization, reduction, and repackaging facility	3	Waste characterization, reduction, and repackaging facility	3	Waste characterization, reduction, and repackaging facility	3	Waste characterization, reduction, and repackaging facility	3
	TA-50-190			Liquid waste tank	2								
	TA-50-0069 Outside	Nondestructive Analysis Mobile Activities				NDA mobile activities outside TA-50-69	2	TA-50 External NDA mobile activities outside TA-50-69	2	TA-50 External NDA mobile activities outside TA-50-69	2	TA-50 External NDA mobile activities outside TA-50-69	2
	TA-50-0069 Outside	Drum Storage				Drum staging/ storage pad and waste container temperature equilibration activities outside TA-50-69	2	TA-50 External Drum staging/ storage pad and waste container temperature equilibration activities outside TA-50-69	2	TA-50 External Drum staging/s torage pad and waste container temperature equilibration activities outside TA-50-69	2	TA-50 External Drum staging/ storage pad and waste container temperature equilibration activities outside TA-50-69	2

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
	TA-54-AreaG	LLW Waste Storage/ Disposal	2	TA-54 Waste Storage and Disposal Facility	2	TA-54 Waste Storage and Disposal Facility (Area G)	2	TA-54 Waste Storage and Disposal Facility (Area G)	2	TA-54 Waste Storage and Disposal Facility (Area G)	2	TA-54 Waste Storage and Disposal Facility (Area G)	2
				Low level waste (LLW) (including mixed waste) storage and disposal in Domes, pits, shafts, and trenches. TRU waste storage in domes and shafts (does not include TWISP). TRU legacy waste in pits and shafts. Low level disposal of asbestos in pits and shafts. Operations building; TRU waste storage	2	Low level waste (LLW) (including mixed waste) storage and disposal in Domes, pits, shafts, and trenches. TRU waste storage in domes and shafts (does not include TWISP). TRU legacy waste in pits and shafts. Low level disposal of asbestos in pits and shafts. Operations building; TRU waste storage	2	Low level waste (LLW) (including mixed waste) storage and disposal in Domes, pits, shafts, and trenches. TRU waste storage in domes and shafts (does not include TWISP). TRU legacy waste in pits and shafts. Low level disposal of asbestos in pits and shafts. Operations building; TRU waste storage	2	Low level waste (LLW) (including mixed waste) storage and disposal in Domes, pits, shafts, and trenches. TRU waste storage in domes and shafts (does not include TWISP). TRU legacy waste in pits and shafts. Low level disposal of asbestos in pits and shafts. Operations building; TRU waste storage	2	Low level waste (LLW) (including mixed waste) storage and disposal in Domes, pits, shafts, and trenches. TRU waste storage in domes and shafts (does not include TWISP). TRU legacy waste in pits and shafts. Operations building; TRU waste storage	2
	TA-54	TWISP		Transuranic Waste Inspect-able Storage Project (TWISP)	2	TA-54 Transuranic Waste Inspect-able Storage Project (TWISP)	2	TA-54 Transuranic Waste Inspect-able Storage Project (TWISP)	2	TA-54 Transuranic Waste Inspect-able Storage Project (TWISP)	2	TA-54 Transuranic Waste Inspect-able Storage Project (TWISP)	2

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
								Pit 2 Recovery of buried TRU waste (Note: TWISP)	2	Pit 2 Recovery of buried TRU waste (Note: TWISP)	2		
	TA-54-0002	TRU Storage Dome		Operations building; TRU waste storage	3			Radioactive and chemical waste storage; fabric dome with TRU waste drum storage	3				
	TA-54-0033	TRU Drum Preparation	2					TRU waste storage, fabric dome with TRU waste drum (Note: TWISP)	2	TRU waste storage, fabric dome with TRU waste drum (Note: TWISP)	2	TRU waste storage, fabric dome with TRU waste drum (Note: TWISP)	2
	TA-54-0038	RANT	2	Radioactive Assay Nondestructive Testing (RANT) Facility	3	TA-54 Radio- active Assay Nondestructive Testing (RANT) Facility	3	TA-54 Radio- active Assay Nondestructive Testing (RANT) Facility	3	TA-54 Radio- active Assay Nondestructive Testing (RANT) Facility	3	TA-54 Radio- active Assay Nondestructive Testing (RANT) Facility	3
				Nondestructive assay and examination of waste drums, WIPP certification of TRU waste drums, TRUPACT loading of drums	3	Nondestructive assay and examination of waste drums, WIPP certi- fication of TRU waste drums, TRUPACT loading of drums	3	Nondestructive assay and examination of waste drums, WIPP certi- fication of TRU waste drums, TRUPACT loading of drums	3	Nondestructive assay and examination of waste drums, WIPP certi- fication of TRU waste drums, TRUPACT loading of drums	3	Nondestructive assay and examination of waste drums, WIPP certi- fication of TRU waste drums, TRUPACT loading of drums	3

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
								DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
	TA-54-0048	TRU Storage Dome	2	Radioactive and chemical waste storage; fabric dome with TRU waste drum storage	3			Radioactive and chemical waste storage; fabric dome with TRU waste drum storage	3				
	TA-54-0049	TRU Storage Dome	2	Radioactive and chemical waste storage; fabric dome with TRU waste drum storage	3			Radioactive and chemical waste storage; fabric dome with TRU waste drum storage	3				
	TA-54-0144	Shed	2										
	TA-54-0145	Shed	2										
	TA-54-0146	Shed	2										
	TA-54-0153	TRU Storage Dome	2	Radioactive and chemical waste storage; fabric dome with TRU waste drum storage	3			Radioactive and chemical waste storage; fabric dome with TRU waste drum storage	3				
	TA-54-0177	Shed	2										
	TA-54-0226	Temporary Retrieval Dome	2	TRU waste placement (incidental to remediation)	2	TRU waste placement (incidental to remediation)	2						
	TA-54-0229	Tension Support Dome	2	TRU waste placement (incidental to remediation)	2	TRU waste placement (incidental to remediation)	2						
	TA-54-0230	Tension Support Dome	2	TRU waste placement (incidental to remediation)	2	TRU waste placement (incidental to remediation)	2						

[illegible][illegible]

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
	TA-33-0086	Former Tritium Research	3		2	TA-33 High Pressure Tritium Facility	2	TA-33 High Pressure Tritium Facility	2	TA-33 High Pressure Tritium Facility ^c	2		
						Former tritium research facility	2	Former tritium research facility	2	Former tritium research facility	2		
	TA-35-0002	Nuclear Safeguards Research Facility	3	Multi-tenant office and laboratory facility with numerous non-ANSI certified Uranium Sources >HC-2 threshold values	3								
	TA-35-0027	Nuclear Safeguards Research Facility	3	Safeguard assay instruction and related research; Am-241 exceeding HC-2 threshold quantities	3								
2.17 (NA)		<i>Environmental Restoration Project</i>											
		(Note: on-site transportation was evaluated under 4.10.3.1 as part of the Affected Environment)						Site Wide Transportation	T B D	Site Wide Transportation	T B D	Site Wide Transportation	T B D

Table B-1. Comparison of Nuclear Facilities Lists (continued)

SWEIS ROD				DOE 1998		DOE 2000		FWO-OAB 401				PS-OAB-401	
								REV. 1 (JUNE 2001)		REV. 2 (DECEMBER 2001)		REV. 3 (JULY 2002)	
SECTION /TABLE	BLDG.	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C	DESCRIPTION	H C
												Laboratory nuclear materials transportation that is not DOT certified is now included in the scope of 10 CFR 830	T B D

^a TA-03-0159 removed from list in April 2000.

^b WNR Facility Target 4 downgraded to below Category 3 and removed from Nuclear Facilities List in July 2002.

^c TA-33-86, High Pressure Tritium Facility, removed from Nuclear Facilities List in March 2002.

Table C-1. Radiological Facility List

SWEIS ROD				FWO-OAB-403, Rev. 0		PS-OAB-403, Rev. 1	
SWEIS YEARBOOK	BUILDING	DESCRIPTION	HAZ CAT	DESCRIPTION	HAZ CAT	DESCRIPTION	HAZ CAT
2.1		<i>Plutonium Complex^{a,b}</i>					
2.2		<i>Tritium Facilities^{a,b}</i>					
2.3		<i>Chemistry and Metallurgy Research Building^{a,b}</i>					
2.4		<i>Pajarito Site^{a,b}</i>					
2.5		<i>Sigma Complex^b</i>					
2.5	TA-3-35	Press Building	L/RAD	Sigma Press Building	RAD	Sigma Press Building	RAD
2.5	TA-3-66	Sigma Building	NHC 3	Sigma Building	RAD	Sigma Building	RAD
2.5	TA-3-159	Thorium Storage	NHC 3	Sigma Thorium Storage	RAD	Sigma Thorium Storage	RAD
2.6		<i>Materials Science Laboratory</i>					
2.6	TA-3-1698	Materials Science Lab	L/CHEM	Material Science Lab	RAD	Material Science Lab	RAD
2.7		<i>Target Fabrication Facility^a</i>					
2.8		<i>Machine Shops</i>					
2.8	TA-3-102	Tech Shops Addition	L/RAD	Tech Shop Add	RAD	Tech Shop Add	RAD
2.9		<i>High Explosives Processing^b</i>					
2.9	TA-8-22	X-Ray Facility	NHC 2	X ray Facility ^c	RAD	X ray Facility ^c	RAD
2.9	TA-8-70	Nondestructive Testing	NHC 2	Nondestructive Testing	RAD	Nondestructive Testing	RAD
2.9	TA-8-120		NA	Radiography ^c	RAD	Radiography ^c	RAD
2.9	TA-11-30	Vibration Test Building	L/ENS	Vibration Test ^c	RAD	Vibration Test ^c	RAD
2.9	TA-16-88	Casting Rest House	L/CHEM	RAM Machine Shop	RAD	RAM Machine Shop	RAD
2.9	TA-16-202					Laboratory	RAD
2.9	TA-16-207		NA	Component Testing ^c	RAD	Component Testing ^c	RAD
2.9	TA-16-300		NA	Component Storage ^c	RAD	Component Storage ^c	RAD
2.9	TA-16-301	Rest House	L/ENS	Component Storage ^c	RAD	Component Storage ^c	RAD
2.9	TA-16-302	Process Building	L/ENS	Component Storage Training ^b	RAD	Component Storage Training ^b	RAD
2.9	TA-16-332		NA	Component Storage	RAD	Component Storage	RAD
2.9	TA-16-410	Assembly Building	L/ENS	Assembly Building	RAD	Assembly Building	RAD
2.9	TA-16-411	Rest House	NHC 2	Assembly Building ^c	RAD	Assembly Building ^c	RAD
2.9	TA-16-413	Rest House	L/ENS	Component Storage ^c	RAD		
2.9	TA-16-415	Rest House	L/ENS	Component Storage ^c	RAD		
2.9	TA-37-10	Magazine	L/ENS	Storage Magazine ^c	RAD	Storage Magazine ^c	RAD
2.9	TA-37-14	Magazine	L/ENS	Storage Magazine ^c	RAD	Storage Magazine ^c	RAD
2.9	TA-37-16					Storage Magazine	RAD
2.9	TA-37-22	Magazine	L/ENS	Storage Magazine ^c	RAD		
2.9	TA-37-24	Magazine	L/ENS	Storage Magazine ^c	RAD	Storage Magazine ^c	RAD
2.9	TA-37-25	Magazine	L/ENS	Storage Magazine ^c	RAD	Storage Magazine ^c	RAD

Table C-1. Radiological Facility List (continued)

SWEIS ROD				FWO-OAB-403, REV. 0		PS-OAB-403, REV. 1	
SWEIS YEARBOOK	BUILDING	DESCRIPTION	HAZ CAT	DESCRIPTION	HAZ CAT	DESCRIPTION	HAZ CAT
2.10		<i>High Explosives Testing</i>					
2.10	TA-15-R183		NA	Vault	RAD	Vault	RAD
2.11		<i>Los Alamos Neutron Science Center^b</i>					
2.11	TA-53-945		NA	RLW Treatment Facility	RAD	RLW Treatment Facility	RAD
2.11	TA-53-954		NA	RLW Basins	RAD	RLW Basins	RAD
2.12		<i>Bioscience Facilities^a</i>					
2.12	TA-43-1	Health Research Laboratory	L/RAD and CHEM			Bio Lab	RAD
2.13		<i>Radiochemistry Facility^{a,b}</i>					
2.14		<i>Radioactive Liquid Waste Treatment Facility^{a,b}</i>					
2.15		<i>Solid Radioactive and Chemical Waste Facilities^{a,b}</i>					
2.15	TA-54-412		NA			DVRS	RAD
2.16		<i>Non-Key Facilities^b</i>					
2.16	TA-2-1	Omega West Reactor	L/RAD	Omega Reactor ^d	RAD	Omega Reactor ^d	RAD
2.16	TA-3-16					Ion Exchange	RAD
2.16	TA-3-34	Cryogenics Bldg B	L/CHEM	Cryogenics Bldg B	RAD	Cryogenics Bldg B	RAD
2.16	TA-3-40	Physics Bldg	NHC 3	Physics Bldg (HP)	RAD	Physics Bldg (HP)	RAD
2.16	TA-3-169		NA			Warehouse	RAD
2.16	TA-3-1819		NA			Experiment Mat'l Lab	RAD
2.16	TA-33-86	High Pressure Tritium	NHC 3			High Pressure Tritium	RAD
2.16	TA-21-5	Laboratory Building	L/RAD	Lab Bldg ^d	RAD	Lab Bldg ^d	RAD
2.16	TA-21-150	Molecular Chemistry Building	L/RAD	Molecular Chemical ^d	RAD		
2.16	TA-35-2	Nuclear Safeguards Research	NHC 3	Nuclear Safeguards Research	RAD	Nuclear Safeguards Research	RAD
2.16	TA-35-27	Nuclear Safeguards Lab	NHC 3	Nuclear Safeguards Lab	RAD	Nuclear Safeguards Lab	RAD
2.16	TA-35-125	Laser Building	L/RAD				
2.16	TA-36-1		NA			Laboratory and offices	RAD
2.16	TA-36-214		NA			Central HP Calibration Facility	RAD
2.16	TA-41-1	Underground Vault	L/RAD	Underground Vault ^c	RAD	Underground Vault ^c	RAD
2.16	TA-41-4	Laboratory Building	M/RAD	Laboratory ^c	RAD		
2.17		<i>Environmental Restoration Project^a</i>					

^a No radiological facilities identified in September 2001.

^b Refer to Appendix B Nuclear Facilities List.

^c Could contain radiological material on an interim basis.

^d Scheduled for decontamination and decommissioning.

Appendix D. NPDES Outfall Status Summary

	NPDES CATEGORY/ OUTFALL NO.	TA	BLDG	FMU NO.	DRAINAGE BASIN	EPA DELETE DATE
1	01S	3	8	0	Sandia	
2	01A 001	3	22	80	Sandia	Remaining
3	02S	9		N/A	Pajarito	Prior to 94
4	01A 002	3	22			Combined with 001
5	03S	16		N/A	Water	Prior to 94
6	01A 003	3-	22			Combined with 001
7	04S	18		N/A	Pajarito	Prior to 94
8	01A 004	3	22			Combined with 001
9	05S	21	STP	80	Los Alamos	3/10/98
10	01A 005	3	22			Combined with 001
11	06S	41	STP			
12	02A 006	21	357			Eliminated
13	07S	46		N/A	Canada del Buey	Prior to 94
14	02A 007	16	540	80	Valle	5/15/98
15	08S	48	5			Combined with 10S
16	02A 008	22	6			Eliminated 6/84
17	09S	53		N/A	Los Alamos	Prior to 94
18	03A 009	3	102	70	Two Mile	7/31/96
19	10S	35		N/A	Mortandad	Prior to 94
20	04A 010	3	105			Eliminated 4/87
21	11S	8	9			Combined with 02S
22	04A 011	22	5			Eliminated 4/87
23	12S	46		N/A	Canada del Buey	Prior to 94
24	04A 012	35	67			Eliminated 4/87
25	13S	46	SWS	80	Canada del Buey	Remaining
26	04A 013	46	30	66	Canada del Buey	12/6/95
27	04A 014	46	88	66	Canada del Buey	7/11/95
28	04A 015	48	1			Combined with 045
29	04A 016	48	1	66	Mortandad	9/19/97
30	04A 017	53	2			Combined with 114
31	04A 018	46	24, 59, 76	66	Canada del Buey	12/6/95
32	03A 019	2	44			Eliminated 5/16/90
33	03A 020	2	49	66	Los Alamos	7/11/95
34	03A 021	3	29	65	Mortandad	Remaining
35	03A 022	3	2274	73	Mortandad	Remaining
36	03A 023	3	163, 287	77	Sandia	7/11/95
37	03A 024	3	187	73	Sandia	Remaining
38	03A 025	3	208	77	Two Mile	7/20/98
39	03A 026	3	208			Combined with 025
40	03A 027	3-285	285, SCC	63	Sandia	Remaining
41	03A 028	15	185, 202	67	Water	Remaining
42	03A 029	16	340			Combined with 054
43	03A 030	21	2			Eliminated 4/87
44	03A 031	21	143	80	Los Alamos	7/11/95
45	03A 032	21	150	66	Los Alamos	7/31/96
46	03A 033	21	152	70	Los Alamos	3/1/86
47	03A 034	21	166, 167	70	Los Alamos	9/19/97
48	03A 035	21	210	71	Los Alamos	9/19/97
49	03A 036	21	152, 155, 220	70	Los Alamos	9/19/97

Appendix D. NPDES Outfall Status Summary (continued)

	NPDES CATEGORY/ OUTFALL NO.	TA	BLDG	FMU NO.	DRAINAGE BASIN	EPA DELETE DATE
50	03A 037	21	314	66	Los Alamos	7/31/96
51	03A 038	33	114	75	Chaquehi	9/19/97
52	03A 039	35	33			Eliminated
53	03A 040	43	1	72	Los Alamos	1/11/99
54	03A 041	43	1			Combined with 040
55	03A 042	46	1	70	Canada del Buey	3/10/98
56	03A 043	46	31	66	Canada del Buey	7/31/96
57	03A 044	46	86			Eliminated 4/87
58	03A 045	48	1	66	Mortandad	12/6/99
59	03A 046	48	1			Combined with 045
60	03A 047	53	60	61	Los Alamos	Remaining
61	03A 048	53	62	61	Los Alamos	Remaining
62	03A 049	53	64	61	Los Alamos	Remaining
63	050	21	257	N/A	Los Alamos	Last DMR 6/85 ^a
65	051	50	1 RLWTF	84	Mortandad	Remaining
66	05A 052	16	380	70	Water	Prior to 94
67	05A 053	16	410	70	Water	1/14/98
68	05A 054	16	340	70	Valle	7/20/98
69	05A 055	16	1507 (HEWTF)	70	Valle	Remaining
70	05A 056	16	260	70	Valle	1/14/98
71	05A 057	16	265, 267	70	Valle	Prior to 94
72	05A 058	16	300-306	70	Water	7/31/96
73	04A 059	16	460			Combined with 072
74	03A 060	16	430	70	Water	7/31/96
75	05A 061	16	280	70	Valle	7/31/96
76	05A 062	16	342	70	Valle	7/31/96
77	05A 063	16	400	70	Water	12/5/95
78	05A 064	22	34		Pajarito	
79	05A 065	22	1		Pajarito	
80	05A 066	9A	21, 28, 29, 32, 33,34, 35, 37, 38, 40	67	Valle	3/10/98
81	05A 067	9B	-41, 42, 43, 45, & 46	67	Valle	3/10/98
82	05A 068	9	48	67	Valle	3/10/98
83	05A 069	11	50	70	Water	5/15/98
84	04A 070	16	220	70	Valle	9/19/97
85	05A 071	16	430	70	Water	3/10/98
86	05A 072	16	460	70	Water	9/19/97
87	06A 073	16	222	70	Valle	1/14/98
88	06A 074	8	22	70	Valle	9/19/97
89	06A 075	8	21	67	Valle	1/14/98
90	04A 076	8	70		Valle	Combined with 115
91	06A 077	22	52	67	Pajarito	
92	06A 078	22	34	67	Pajarito	7/31/96
93	06A 079	40	4	67	Pajarito	5/15/98
94	06A 080	40	5	67	Pajarito	5/15/98
95	06A 081	40	8	67	Pajarito	3/10/98

Appendix D. NPDES Outfall Status Summary (continued)

	NPDES CATEGORY/ OUTFALL NO.	TA	BLDG	FMU NO.	DRAINAGE BASIN	EPA DELETE DATE
96	06A 082	40	12	67	Pajarito	1/14/98
97	04A 083	16	202	70	Water	9/19/97
98	04A 084	22	5			Eliminated 4/87
99	04A 085	22	6			Eliminated
100	04A 086	3	216			Eliminated 4/87
101	04A 087	35	46			Eliminated 4/87
102	04A 088	35	67			Eliminated 4/87
103	04A 089	35	34			Eliminated
104	04A 090	35	85			Eliminated 4/87
105	04A 091	16	450	70	Water	9/19/97
106	04A 092	16	370	70	Water	1/14/98
107	04A 093	15	203	67	Valle	Prior to 94
108	04A 094	3	170	62	Sandia	9/19/97
109	095	3	170			Eliminated 4/87
110	05A 096	11	51	70	Valle	5/15/98
111	05A 097	11	52	70	Water	Remaining
112	03A 098	59	1	71	Two Mile	12/6/95
113	06A 099	40	23	67	Pajarito	9/19/97
114	06A 100	40	15	67	Pajarito	5/15/98
115	04A 101	40	9	67	Pajarito	9/19/97
116	04A 102	1	40			Eliminated 6/25/91
117	04A 103	15	40			Eliminated 6/25/91
118	06A 104	18	30, 31			Eliminated 4/87
119	04A 105	15	138			Eliminated
120	06A 106	36	1	74	Three Mile	1/11/99
121	02A 108	0				Inoperative
122	07A 109	3-73	73	80	Sandia	8/4/95
123	04A 110	3-73	73			Eliminated 2/89
124	04A 111	52-1	1			Eliminated 4/87
125	04A 112	52-11	11			Eliminated 4/87
126	03A 113	53-293,1032 (LEDA)	293, 1032, 972	61	Sandia	Remaining
127	03A 114	53-2		61	Sandia	7/11/95
128	04A 115	8-70		70	Valle	9/19/97
129	04A 116	35-29				Eliminated 4/87
130	04A 117	46-41		66	Canada del Buey	7/11/95
131	04A 118	Paj #4		80	Canada del Buey	10/13/99
132	04A 119	Paj #5				Eliminated 4/87
133	120 ^b	3		Geotherm	discharge	Eliminated
134	04A 121	15-263				Eliminated 4/87
135	04A 122	15-45				Eliminated 4/87
136	06A 123	15-R183		67	Valle	1/14/98
137	03A 124	46-169		66	Canada del Buey	12/6/95
138	03A 125	53-28		61	Sandia	7/20/98
139	04A 126	48-8		66	Mortandad	12/6/95
140	04A 127	35-213		73	Mortandad	9/19/97
141	128	22-91		67	Two Mile	12/5/95
142	02A 129	21-357		80	Los Alamos	Remaining
143	03A 130	11-30		70	Water	Remaining

Appendix D. NPDES Outfall Status Summary (continued)

	NPDES CATEGORY/ OUTFALL NO.	TA	BLDG	FMU NO.	DRAINAGE BASIN	EPA DELETE DATE
144	04A 131	48-1		66	Mortandad	1/14/98
145	06A 132	35-87		75	Mortandad	3/10/98
146	04A 133	53-19		61	Sandia	
147	04A 134	16-478				Eliminated 5/16/90
148	04A 135	53-18		61	Sandia	8/16/95
149	03A 136	46-200		66	Canada del Buey	12/6/95
150	04A 137	48-46		66	Mortandad	12/6/95
151	03A 138	3-127				Eliminated 12/90
152	04A 139	15-184		67	Water	9/19/97
153	04A 140	3-141		73	Mortandad	8/16/95
154	04A 141	39-69		67	Ancho	9/19/97
155	04A 142	21-5, 149		66	Los Alamos	7/11/95
156	04A 143	15-306		67	Three Mile	5/15/98
157	03A 145	53-6		61	Sandia	1/14/98
158	03A 146	53-14		61	Sandia	9/19/97
159	04A 147	33-86		70	Chaquehui	7/11/95
160	03A 148	3-1498, 1807		63	Sandia	9/19/97
161	05A 149	16-267		70	Valle	Prior to 94
162	03A 150	41-30			Los Alamos	
163	04A 151	3-22		80	Sandia	8/16/95
164	04A 152	48-28		66	Mortandad	9/19/97
165	04A 153	48-1		66	Mortandad	7/20/98
166	05A 154	40-41		67	Two Mile	12/5/95
167	04A 155	9-50		67	Water	12/6/95
168	04A 156	39-89		67	Ancho	9/19/97
169	04A 157	16-460		70	Water	9/19/97
170	03A 158	21-209		70	Los Alamos	Remaining
171	05A 159	16-360		70	Water	8/16/95
172	03A 160	35-124		73	Mortandad	Remaining
173	04A 161	Otowi #1		80	Pueblo	10/13/99
174	04A 163	Paj #1		80	Sandia	10/13/99
175	04A 164	Paj #2		80	Pajarito	10/13/99
176	04A 165	Paj #3		80	Sandia	10/13/99
177	04A 166	Paj #5		80	Canada del Buey	10/13/99
178	04A 167	LA Well #1B		80	Los Alamos	Prior to 94
179	04A 168	LA Well #2		80	Los Alamos	Prior to 94
180	04A 169	LA Well #3		80	Los Alamos	Prior to 94
181	04A 170	LA Well #5		80	Los Alamos	Prior to 94
182	04A 171	Guaje #1		80	Guaje	8/23/99
183	04A 172	Guaje #1A		80	Guaje	10/13/99
184	04A 173	Guaje #2		80	Guaje	9/21/99
185	04A 174	Guaje #4		80	Guaje	7/20/98
186	04A 175	Guaje #5		80	Guaje	8/23/99
187	04A 176	Guaje #6		80	Rendija	8/23/99
188	04A 177	Guaje Booster 1		80	Guaje	10/13/99
189	04A 178	LA Booster 1		80	Los Alamos	Prior to 94
190	04A 179	Pajarito		Potable	Water blowdown	
191	03A 180	43-44		72	Los Alamos	7/11/95
192	03A 181	55-6		76	Mortandad	Remaining

Appendix D. NPDES Outfall Status Summary (continued)

	NPDES CATEGORY/ OUTFALL NO.	TA	BLDG	FMU NO.	DRAINAGE BASIN	EPA DELETE DATE
193	04A 182	21-1003		80	Los Alamos	5/15/98
194	06A 183	3-510		63	Sandia	8/16/95
195	03A 184	53-17		N/A	Sandia	8/16/95
196	03A 185	15-312 (DARHT)		67	Water	Remaining
197	04A 186	Otowi #4		80	Los Alamos	10/13/99
198	03A 199	3-1837		63	Sandia	In permit 2-1-01

^a DMR = Discharge Monitoring Report. The last DMR submitted for this outfall was in June 1985.

^b Research of the NPDES records indicates that Outfall 120 has not been on any NPDES permit since 1978. The “geotherm” under the Drainage Basin Column would indicate that a geothermal discharge was anticipated.

Appendix E.

Preliminary Assessment of Potential Impact of LANL Site Boundary Changes and Land Transfer on Accident Analyses in the SWEIS

Introduction

This report summarizes the results of evaluating the potential for DOE site boundary changes and land transfers to have effects on the analyses of risk-dominant accidents in the *Site-Wide Environmental Impact Statement (SWEIS) for Continued Operation of the Los Alamos National Laboratory* (DOE 1999). A recent DOE policy on the use of site boundaries and commercial ventures and municipal operations within LANL as well as transfers of land to public entities resulted in changes in distances to public receptors at which effects are predicted. These changes potentially create the need to alter the accident analyses in the SWEIS that predict, among other things, radiological dose consequences and health effects to public receptors. As such, we conducted a preliminary assessment of the potential for these changes to cause impacts to radiological dose consequences and effects for risk-dominant accidents reported in the SWEIS.

Risk-dominant accidents analyzed in the SWEIS assess radiological consequences to maximally-exposed individual (MEI) members of the public. Each accident has a location identified, usually the nearest point of public access or location, at which a maximum dose could occur. Highways over which the DOE can exercise control during emergency conditions are not necessarily public MEI locations. Commercial ventures and municipal operations within LANL are not necessarily MEI locations. But analyses for EISs such as the SWEIS often evaluate several public receptor locations for each accident. Pajarito Road, Royal Crest Trailer Park, State Road 502, State Road 4, Diamond Drive, White Rock, or the Los Alamos town site served as MEI or alternate public receptor locations for the 16 risk-dominant radiological accidents. Alternatively, parcels of DOE/LANL property given or transferred to public entities do introduce new locations of unrestricted public access, potentially changing the MEI location for a given LANL facility. This, in turn, can potentially change the results of a radiation dose consequence/human health effects analysis. Given that the SWEIS serves as the baseline to which all subsequent (post-1999) changes in operations and potential accidents are compared under NEPA, it is important to determine whether any major changes in the distance analysis parameter might have occurred because incremental risk from the introduction of new operations are evaluated against the SWEIS. Thus, we contrasted the MEI location for risk-dominant accidents in the SWEIS against the locations of already transferred parcels, new site boundaries, or proposed new commercial ventures and municipal operations. We then used subjective judgment on whether these new locations had the potential to substantially change estimated MEI radiation doses given new distances to public receptors.

Methods

The general procedure for making this assessment was to contrast the role of a site boundary or transferred parcel of land in analyzing accidents under NEPA against the magnitude of the changes in distances to site boundaries or transferred parcels. More specifically, we developed an understanding of the nature of the site boundary and land ownership changes, identified resultant changes in distances to public MEI locations, and considered potential changes to MEI dose consequences and human health effects. We discuss the magnitude of change to accident analyses in the SWEIS.

We consulted key scientists and managers at LANL (as cited throughout this document) that conduct accident analyses or manage related programs or activities as well as reviewing the SWEIS (DOE 1999) for potential impacts. While accident analyses for NEPA can, and often do, have different objectives than accident analyses for facility safety authorization, we note that the DOE has agreed that impacts of the site boundary changes to LANL facility safety authorizations can be assessed at the time of a facility's normally scheduled update to facility safety documents (Satterwhite 2003).

Site Boundary Changes

On December 11, 2002, DOE/NNSA/LASO established a policy on the determination and use of the DOE/LANL site boundary for use in evaluating dose to the Maximally Exposed Offsite Individual (MEOI) in facility safety authorization basis (AB) documents (DOE 2002a). The new boundaries are shown in Figure E-1. The policy also included instruction on how to treat potential receptors at commercial ventures and municipal operations within LANL; e.g., the Research Park or the proposed new county landfill. These entities would include parcels of DOE/LANL property that were given to public entities through the Land Transfer process.

The first objective of the accident analysis in NEPA reviews is to characterize the overall risk posed by operations, creating a context for the decision maker and putting the operations in perspective for the public (DOE 2002b). The concern is with presenting accidents that illustrate dominant consequences and their likelihood. Dominant consequences are often judged on the basis of maximum dose to the public from a spectrum of accidents, which is often highlighted by a consideration of the MEI member of the public. This MEI is defined as the outdoor, offsite location having the highest exposure and is almost always at the site boundary closest to the release point. Other types of receptors, such as workers and populations in surrounding communities are generally unaffected by the site boundary changes. To obtain a general sense of the magnitude of change to the nearest site boundary for various facilities at LANL we consulted LANL's Probabilistic Risk and Hazards Analysis Group (D-11) (Letellier 2002, 2003). For various facilities, D-11 made preliminary estimates of distances to the new nearest site boundaries for 16 equally spaced points radiating outwardly from each facility. For some of these facilities, distances to long-standing receptor locations were contrasted with new receptor locations. While there are sometimes changes in the distance to the nearest site boundary for several sectors from a given facility, in general there has been very little change to the single nearest receptor. Using TA-55 for example (Figures E-2a and E-2b), although the receptor location in sectors 2, 3, 4, 5, 13, 14, 15, and 16 are now closer because of the addition of East Jemez Road (Truck Route) as a new receptor location, the distance to the nearest receptor—Royal Crest Trailer Park—has not changed. There are few examples where the distance to the nearest receptor from a facility has changed substantially.

The SWEIS is the most recent substantial NEPA baseline documenting the effect of accidents to human health and the environment. For many of the risk-dominant facility-specific accidents, Pajarito Road is an MEI location in the SWEIS. The most substantial changes to site boundaries with potential impact on NEPA assessments may be the allowance of continual public access to East Jemez Road and to the portion of State Road 4 from White Rock to Bandelier (Figure E-1). With no change to Pajarito Road as a receptor location, the changes for the most part do not affect maximum doses to receptors for the majority of facility-specific accidents in the SWEIS. For example, for the bounding accident in the SWEIS ("RAD-09"), a TRU waste drum puncture or failure at TA-54, the MEI location does not change from Pajarito Road. For RAD-12, an earthquake-induced release of Pu from the DARHT generating relatively high potential MEI doses and potential effects, MEI doses were computed for State Road 4, Pajarito Road, and Bandelier National Monument; these locations remain in effect for the DARHT. Thus, because EISs often do estimate doses at several offsite receptor locations, the impact of a site boundary change is lower than otherwise if only one receptor location was used.

A few facilities will be affected by the change in site boundaries. The LANSCE at TA-53, Beryllium Technology Facility (BTF) at TA-03, and Sigma Facility at TA-03 are examples of facilities that will have a closer MEI. While the change in distance to nearest MEI for the LANSCE could increase dispersion coefficients by a factor of approximately four, it was screened out of final consideration in the SWEIS due to a lack of credible accidents. The BTF was also screened due to a lack of credible accidents. Thus, for some facilities, even though the distance to MEI is shortened, the lack of consequences of concern makes the issue of closer MEIs less impacting. In the SWEIS, the Sigma Facility was retained for detailed analysis of consequences of an accident involving hydrogen cyanide. The magnitude and type of effects are measured

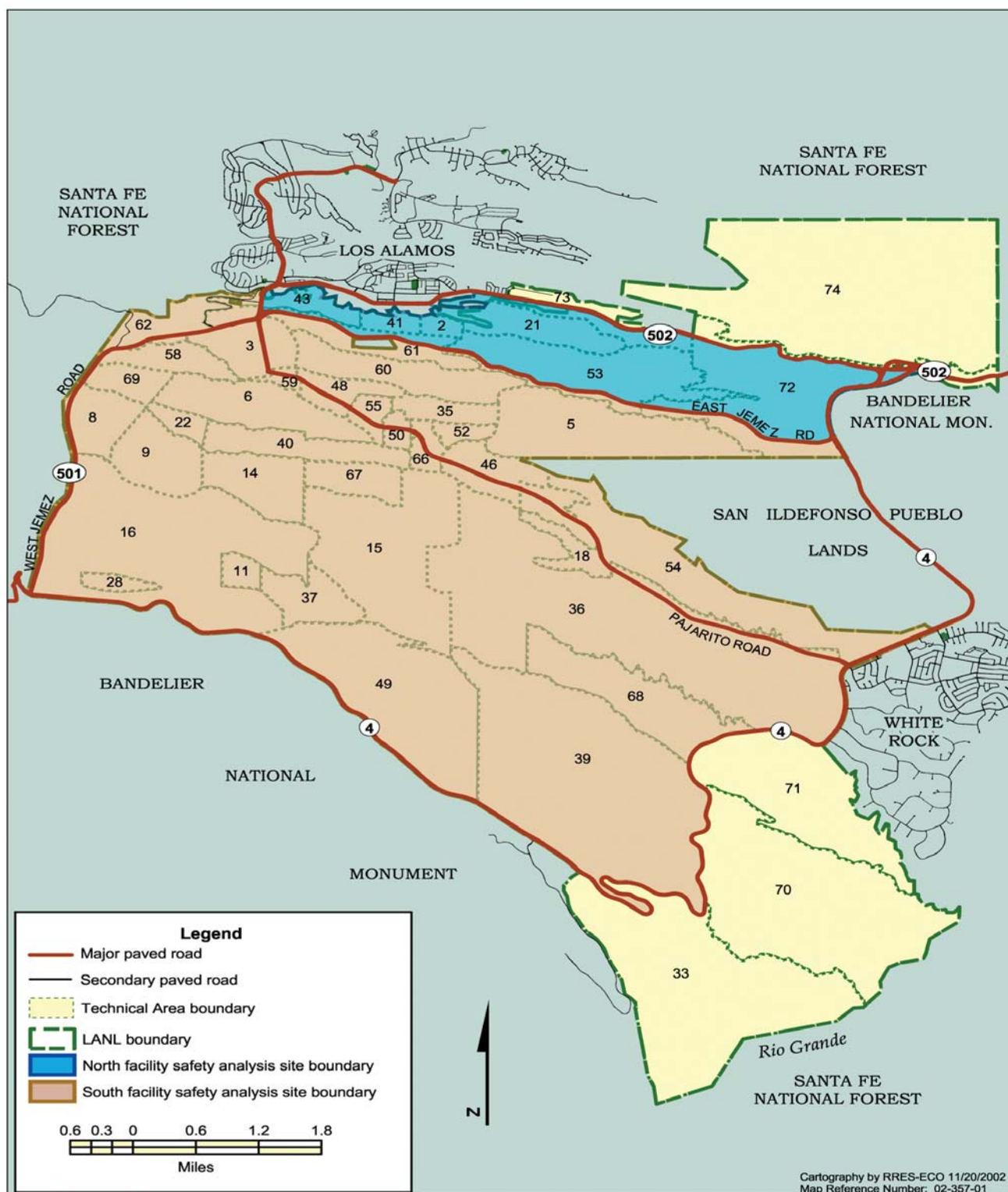


Figure E-1. Site boundaries for conducting accident analyses at LANL (Source: RRES/ECO).

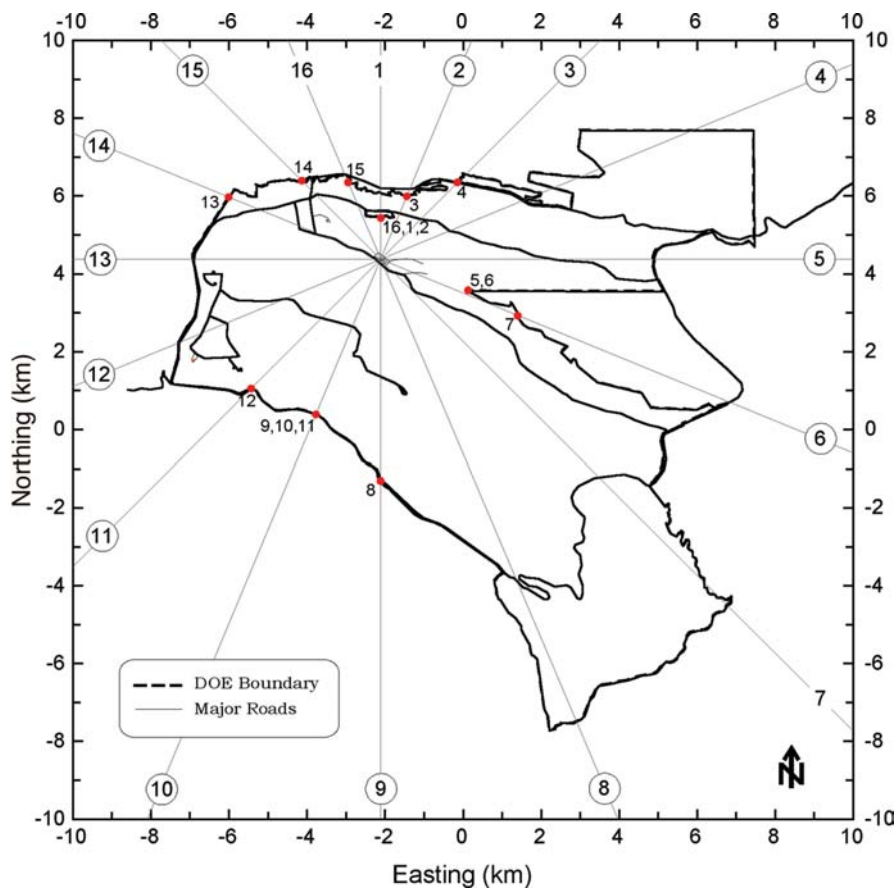


Figure E-2a. TA-55 old evaluation boundary (Source: Letellier 2002).

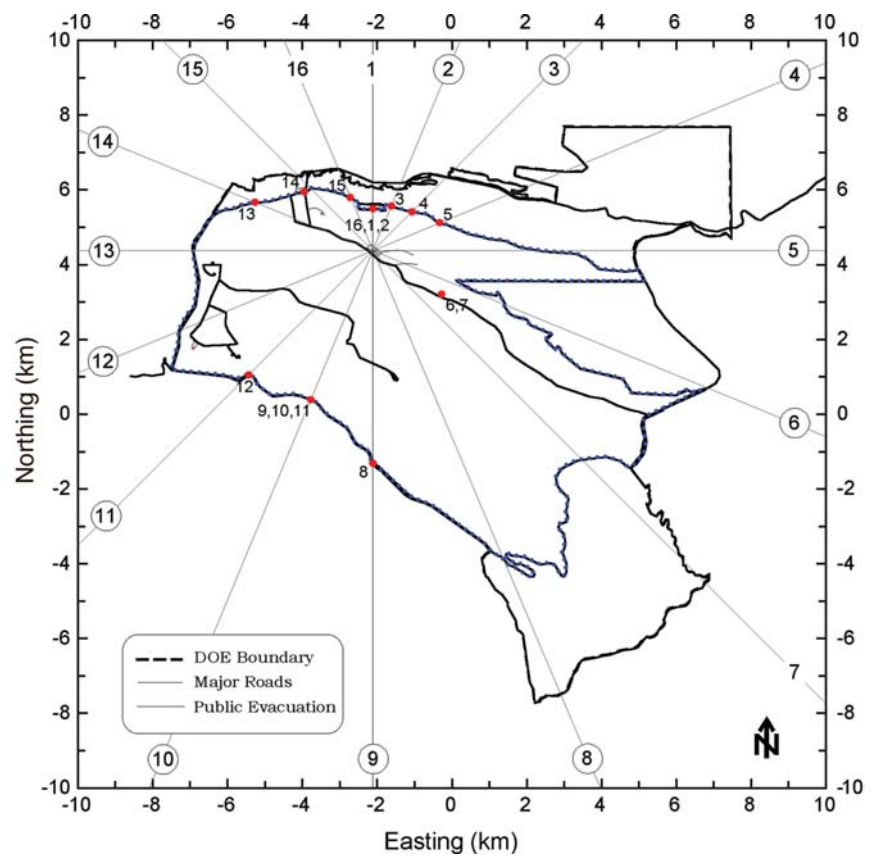


Figure E-2b. TA-55 new evaluation boundary (Source: Letellier 2002).

by estimating distances within which Emergency Response Planning Guideline (ERPG) conditions could occur. ERPG-2 or -3 effects are irreversible health effects (ERPG-2) or life threatening health effects (ERPG-3). The SWEIS showed that even under adverse dispersion conditions, the ERPG distances did not extend to the Los Alamos town site, which was the nearest public receptor location at approximately 0.7 mi away. East Jemez Road is relatively close (~0.4 mi) to the Sigma Facility. This is one example where the change in policy could result in ERPG-2 and -3 conditions applying to members of the public, at least for the more conservative scenarios analyzed in the SWEIS for this facility.

The second objective of accident analyses under NEPA is to realistically quantify the increment in risk among alternatives, as input to a reasoned choice among the alternatives. To achieve this, there is a need to identify significant changes in the frequency or consequence/effect of postulated accidents among the alternatives. Changes in site boundaries would most affect the consequence portion of risk estimates. In our review of the SWEIS for changes in consequences among the different alternatives that could be affected by the site boundary changes we almost always found no change for the No Action Alternative. Since the site boundary changes have minimal impact on consequences, little or no change is expected among the alternatives disclosed in the SWEIS.

Land Transfer

Table E-1 lists the parcels of land that were transferred in 2002 as well as those remaining to be transferred. The parcels are also shown in Figure E-3. All of the transfer parcels appear to be located at or very near a DOE/LANL boundary, the majority of them on the north boundary and some on the southeast boundary adjacent to the city of White Rock. The 16 radiological risk-dominant accidents evaluated in the SWEIS and affected facility are listed in Table E-2 and the approximate location of some of the key facilities are shown in Figure E-3. Only two of the 16 radiological accidents appear to concern facility locations that have a shorter distance to a transfer parcel than to the MEI location analyzed in the SWEIS.

Facilities for which Pajarito Road was used as an MEI location (e.g., RANT Facility, LACEF at TA-18, WCCRF and TWISP at TA-54, or Plutonium Facility at TA-55) are unaffected by the land transfer because Pajarito Road remains much closer to those facilities than the nearest transferred parcel or group of parcels such as the DOE/LASO property off of Trinity Drive or property in the TA-21 area. Facilities for which Diamond Drive was used as an MEI location such as the CMR are unaffected by the land transfer because Diamond Drive remains closer to those facilities than the nearest transferred parcel or group of parcels such as the DOE/LASO property. Facilities for which State Road 4 south of LANL were used as an MEI location such as the DARHT at TA-15 are unaffected by the land transfer because State Road 4 remains much closer to those facilities than the nearest transferred parcel or group of parcels such as the group of parcels (DOE/LASO, TA-21, Manhattan Monument, Airport, etc.) that are far to the north of the DARHT. Facilities for which the Royal Crest Trailer Park off of E. Jemez Road was used as an MEI location such as the Plutonium Facility at TA-55 are unaffected by the land transfer because the Trailer Park is still closer to those facilities to the south than the nearest transferred parcel or group of parcels such as the group of parcels (DOE/LASO, TA-21, Manhattan Monument, Airport, etc.) to the north of the Plutonium Facility.

Table E-1. Land Parcels Transferred and to be Transferred

DESIGNATOR	DESCRIPTION	RECIPIENT	TRANSFER DATE	ACREAGE
TRANSFERRED				
A-1	Manhattan Monument (0 ac)	County	11/1/06	0.07
A-12	LAAO-1 (East)	County	11/1/06	4.51
A-17	TA-74-1 (West) (3 ac)	County	11/1/06	5.52
A-19	White Rock-1	County	11/1/06	76.33
A-2	Site 22 (0 ac)	County	11/1/06	0.17
A-3	Airport-1 (East) (8 ac)	County	11/1/06	9.44
A-6	Airport-4 (West)	County	11/1/06	4.18
A-9	DP Road-2 (North) (Tank Farm) (4 ac)	County	11/1/06	4.25
B-1	White Rock-2	Pueblo	11/1/06	14.94
B-2	TA-74-3 (North)(Includes B-4)	Pueblo	11/1/06	2089.88
TO BE TRANSFERRED				
B-3	TA-74-4 (Middle) (Little Otowi)	Pueblo	10/1/07	3.40
C-1	White Rock	Highway	TBD	15.41
C-2	White Rock "Y"-1	Highway	TBD	104.10
C-3	White Rock "Y"-3 (deferred)	Highway	TBD	53.60
A-18	TA-74-2 (South)	County	10/1/07	676.52
A-7	Airport-5 (Central) (7 ac)	County	10/1/07	5.83
A-8	DP Road-1 (South) (25 ac)	County	10/1/07	24.92
A-15	TA-21-1 (West)	County	10/1/07	7.55
A-13	LAAO-2 (West) (LAAO Bldg)	County	10/1/09	8.82
A-4	Airport-2 (North) (90 ac)	County	10/1/09	92.60
A-10	DP Road-3 (East)	County	10/1/09	13.80
A-11 (3)	DP Road-4 (West) (Archives)	County	10/1/10	3.09
A-14	Rendija	County	10/1/11	918.30
A-5	Airport-3 (South) (deferred)	County	None	34.67
A-16	TA-21-2 (East) (deferred)	County	None	252.10
A-20	White Rock "Y"-2 (deferred)	County	None	323.40
C-4	White Rock "Y"-4 (deferred)	Highway	TBD	20.10

Table E-2. Sixteen Radiological Accidents Evaluated in LANL SWEIS and Affected Facilities

ACCIDENT SCENARIO DESIGNATOR	LOCATION	FACILITY
RAD-01	TA-54-38	Radioassay and Nondestructive Testing (RANT) Facility
RAD-02	TA-3-29	Chemistry and Metallurgy Research (CMR) Facility
RAD-03	TA-18-116	Los Alamos Critical Experiments Facility (LACEF)
RAD-04	TA-15-312	Dual-Axis Radiographic Hydrodynamic Test (DARHT) Facility
RAD-05	TA-21-209	Tritium Science and Fabrication Facility (TSFF)
RAD-06	TA-50-37	Radioactive Materials Research Operations and Demonstration (RAMROD) Facility
RAD-07	TA-50-69	Waste Characterization, Reduction, and Repackaging Facility (WCRRF)
RAD-08	TA-54-G	Tranuranic Waste Inspectable Storage Project (TWISP)
RAD-09	TA-54-G	Tranuranic Waste Inspectable Storage Project (TWISP)
RAD-10	TA-55-4	Plutonium Facility
RAD-11	TA-15-312	Dual-Axis Radiographic Hydrodynamic Test (DARHT) Facility
RAD-12	TA-16-411	Device Assembly Building
RAD-13	TA-18-116	Los Alamos Critical Experiments Facility (LACEF)
RAD-14	TA-55-4	Plutonium Facility
RAD-15	TA-3-29	Chemistry and Metallurgy Research (CMR) Building
RAD-16	TA-3-29	Chemistry and Metallurgy Research (CMR) Building

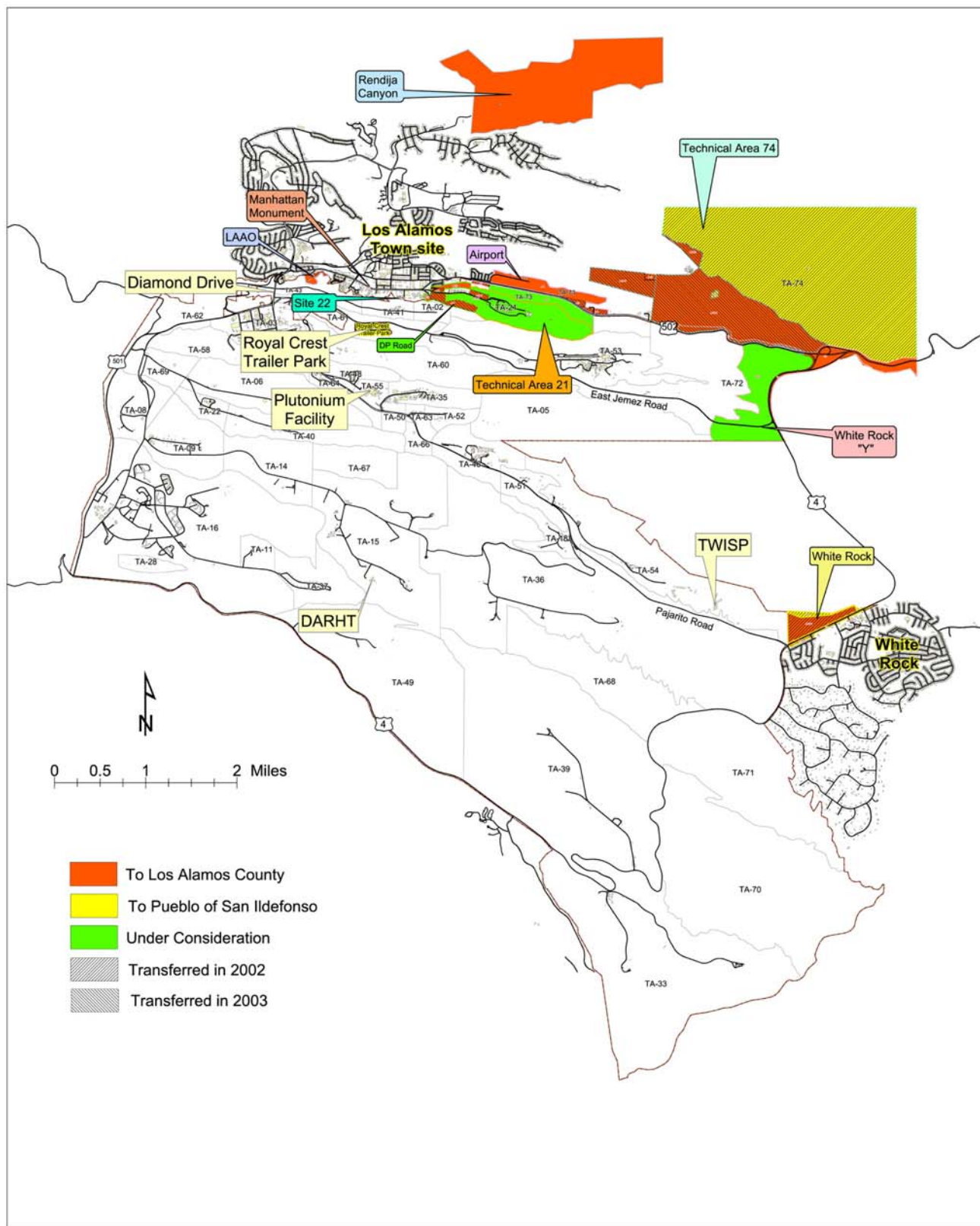


Figure E-3. Location of transfer parcels and key SWEIS accident facilities.

Analyses for which the city of White Rock was used as a receptor location for releases from TA-54 facilities have the potential to be impacted because the White Rock transfer parcels are relatively close to TA-54 facilities. Doses to the city of White Rock MEI were estimated in “RAD-08,” “RAD-09,” and “SITE-01.” The White Rock transfer parcels (“White Rock-1,” “White Rock-2” and “White Rock (C-1)”) are as much as 0.34 mi closer to key facilities than a city of White Rock resident. This represents up to a 38% decrease in distance to the MEI receptor at White Rock. A decrease in distance to receptor doesn’t always result in a dose increase because, depending on the type of release or accident conditions, there may be an area adjacent to the release point that receives none or little of the plume because an elevated plume travels above human receptors due to an elevated release point and/or a buoyant release. Additionally, dose estimates for any given accident in the SWEIS are usually made for several different receptors at a breadth of distances, therefore a change to one dose estimate does not invalidate the comprehensive set of analyses. The TA-54-related accidents had dose estimates made for a closer receptor (~0.13 mi to Pajarito Road) than even the new distance created by the White Rock parcels (~0.59 mi), so the dose to a receptor at the parcels is likely to still be within the range of doses for any give accident. For RAD-08, for example, dose estimates included receptors at Pajarito Road (~0.13 mi) and the dose at Pajarito Road likely bounds any estimates that would be made for the White Rock parcels.

Conclusions

The multiple distances used for analyses of potential accident radiological doses in the SWEIS and the general location of Land Transfer parcels in comparison to previously analyzed receptor locations, result in our judgement that parcels of land transferred to various public entities will have little or no impact on estimated doses in the SWEIS. On this basis there appears to be no need to revise accident analyses in the SWEIS because of land transfers from the DOE to public entities. Although we have not reviewed every facility at LANL for potential impacts to NEPA coverage as a result of the site boundary changes, a review of several facilities and postulated accidents, especially risk-dominant accidents in the SWEIS, resulted in our finding that very few or minimal changes in predicted effects are expected to occur. One exception, a hydrogen cyanide accident at the Sigma Facility, has been noted. The SWEIS still serves the purpose of characterizing LANL operations, differentiating among alternatives, and presenting a baseline that is suitable for tiering and bounding of potential accidents at LANL. We therefore recommend that site boundary changes be considered in future NEPA reviews as appropriate.

References and Key Information Sources:

DOE 2002a: U.S. Department of Energy, “NNSA/OLASO Policy on Site Boundary for Dose Evaluation of the Directionally Dependant Maximally Exposed Offsite Individual,” Memorandum, Dec. 11, 2002, R. Erickson (DOE/OLASO).

DOE 2002b: U.S. Department of Energy, “Analyzing Accidents Under NEPA,” Office of NEPA Compliance and Policy.

DOE 1999: U.S. Department of Energy, “Site-Wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory,” DOE/EIS-0238, Albuquerque Operations Office, Albuquerque, New Mexico, 4 Volumes (January 1999).

Letellier 2002: Personal communication from Bruce Letellier (LANL/D-11) to Gil Gonzales (LANL/RRES-ECO), e-mail December 19, 2002.

Letellier 2003: Personal communications from Bruce Letellier (LANL/D-11) to Gil Gonzales (LANL/RRES-ECO), e-mails February 13, 2003 and February 20, 2003.

Satterwhite 2003: Telephone communication from David Satterwhite (LANL/PS-OAB) to Gil Gonzales (LANL/RRES-ECO), Feb. 12, 2003.

Appendix F. Future Projects

The Appendix F tables present a summary of the TYCSP reports prepared in CY 2001 and CY 2002 for FY 2001 and FY 2003, respectively. To the maximum extent possible, the tables are arranged to compare a project listed in the FY 2003 report to what is identified for the same project in the FY 2001 report. However, because the two TYCSP reports were prepared against different guidelines, the tables in the 2002 Yearbook cannot be easily compared to the tables in Appendix D of the 2001 Yearbook.

The tables in this appendix have several items in common. The Project Name and Number are as they are listed in the TYCSP. In some cases, there have been changes in the name and/or number between the two reports. The “Data from TYCSP” column indicates that the information in a given row is from the CY 2001 (or FY 2001) or from the CY 2002 (or FY 2003) report. The NEPA column identifies the coverage that either has occurred or was/is planned for the project. Other than the data from the TYCSP reports, the only data that have been added are in the Construction Status column on each table. The information in this column is not complete; the information is limited to that which is easily collected. The Funding Category typically has several subheadings. These include several that are not spelled out:

- LI for line item,
- C for proposed capital funded line item,
- TEC for total estimated cost,
- OPC for other project costs,
- PE&D for preliminary engineering and design,
- GPE for general plant equipment,
- GPP for general plant project, and
- D&D for decommissioning and demolition.

Table F-1 presents the data for RTBF line item projects. These appear directly in the budget approved by Congress.

Table F-2 shows the projects associated with RTBF operations of facilities.

Table F-3 identifies the projects under the Facilities and Infrastructure Recapitalization Program.

Table F-4 provides the data for projects that are under neither the RTBF nor the Facilities and Infrastructure Recapitalization Programs. Each project is either a budget line item or a proposed capital project. The line item projects fall into two separate categories – an existing line item or a Cerro Grande Rehabilitation line item.

Table F-5 captures the data for a second set of projects that are under neither the RTBF nor the Facilities and Infrastructure Recapitalization Programs. These projects are expense, general plant, institutional general plant, and institutional projects.

Table F-6 presents the data for a third set of projects that are under neither the RTBF nor the Facilities and Infrastructure Recapitalization Programs. These projects fall under the funding categories of maintenance, standby facility, decommissioning and demolition, and facilities management. The “standby facility” category does not apply at LANL.

Table F-7 lists general plant projects identified in the FY 2001 TYCSP that do not appear in the FY 2003 TYCSP.

Table F-8 summarizes decommissioning and demolition projects that have been identified.

Table F-1. RTBF Line Item Projects

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY					
NAME	NUMBER				LI	C	TEC	OPC	PE&D	PROPOSED CAPITAL PROJECTS - TEC
CMR Upgrades	LANL-92-001	2001	EA-FONSI	Started			Into FY 2001	Into FY 2002		
		2002		Completed in CY 2002	Into FY 2001			Into FY 2002		
APT/Triple A Project	LANL-98-002	2001	EIS-TBD	Started			Into FY 2002	Into FY 2002		
		2002			Into FY 2002			Into FY 2002		
DARHT (Phase 2)	LANL-98-003	2001	EIS-ROD	Started			Into FY 2001	Into FY 2002		
DARHT (Phase 1 & 2)		2002		Continued in CY 2002	Into FY 2001			Into FY 2002		
Nicholas C. Metropolis Center (formerly Strategic Computing Complex)	LANL-99-007	2001	EA-FONSI	Started			Into FY 2002	Into FY 2002		
		2002		Occupancy completed in CY 2002	Into FY 2002			Into FY 2002		
CMR Replacement Project	LANL-03-012	2001	EIS-TBD	Started preconceptual design in 2001				Into FY 2011	Into FY 2003	Into FY 2010
		2002		Design continued in CY 2002	Into FY 2009			Into FY 2011	Into FY 2004	
National Security Sciences Building (formerly SM-43 Replacement)	LANL-03-011	2001	EA-FONSI					Into FY 2006	-	Into FY 2005
	LANL-04-011	2002			Into FY 2005			Into FY 2007	Into FY 2001	
SM-43 D&D	LANL-06-DD-13	2001	CX-TBD							
		2002						^a		
TA-55 Infrastructure Reinvestment	LANL-04-015	2001	EIS-TBD					Into FY 2007		Into FY 2012
	LANL-05-015	2002				Into FY 2012		Into FY 2012	Into FY 2006	
DX Consolidation	LANL-04-016	2001	CX					Into FY 2005	Into FY 2005	Into FY 2008

Table F-1. RTBF Line Item Projects (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY					
NAME	NUMBER				LI	C	TEC	OPC	PE&D	PROPOSED CAPITAL PROJECTS - TEC
DX High Explosives Characterization	LANL-05-016	2002	EA			Into FY 2007		Into FY 2005	Into FY 2005	
Support Services Consolidation	LANL-05-019	2001	CX					Into FY 2005	Into FY 2005	Into FY 2005
	LANL-07-019	2002				Into FY 2007		Into FY 2005		
Radiography Facility	LANL-08-026	2001	EA-TBD					Into FY 2010	Into FY 2008	Into FY 2010
Radiography Facility, TA-55	LANL-08-241	2002				Into FY 2010		Into FY 2010	Into FY 2008	
TA-18 Relocation Project	LANL-02-009	2001	EIS Draft	Started				Into FY 2010	Into FY 2002	Into FY 2010
		2002	EIS-TBD	Continued		Into FY 2007		Into FY 2010	Into FY 2005	
Central Campus Bypass Road	LANL-04-017	2001	EA-TBD	-		I		Into FY 2005	Into FY 2004	Into FY 2007
Rad Liquid Waste Upgrade	LANL-06-021	2001	EA-TBD	-		I		Into FY 2004	Into FY 2006	Into FY 2004
Replacement of Radioactive Liquid Waste Treatment Plant	LANL-07-021	2002				Into FY 2007		Into FY 2005	Into FY 2006	
LANSCE Support Complex	LANL-06-022	2001	EA-TBD	-		I			Into FY 2006	Into FY 2006
Replacement of High Voltage Distribution System for LANSCE Accelerator Complex	LANL-06-022	2002				Into FY 2009		Into FY 2006	Into FY 2006	
Infrastructure Roof Upgrades	LANL-07-023	2001	CX-TBD	-		I		Into FY 2005	-	Into FY 2005
Vulnerable Facility Replacement Program	LANL-07-024	2001	CX-TBD	-		I		Into FY 2007	Into FY 2007	Into FY 2007
LANL Infrastructure Revitalization	LANL-07-025	2001	CX-TBD	-		I		Into FY 2012	Into FY 2007	Into FY 2012
On-Site Generation #1 20MW	LANL-07-027	2001	EA-TBD	-		I		Into FY 2009	Into FY 2008	Into FY 2009

^a D&D of the existing SM-43 structure is being funded as an OPC cost of the National Security Sciences Building project.

Table F-2. RTBF Operations of Facilities

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				GPE	CAPITAL EQUIPMENT PROJECTS	EXPENSE PROJECTS	GENERAL PLANT PROJECTS
Short Pulse Spallation Source (SPSS) Enhancement	LANL-97-045	2001	CX	Continued		Into FY 2003		
		2002		Continued	Into FY 2002			
Fire Suppression Yard Main Replacement (TA-55)	LANL-97-047	2001	CX	Started			Into FY 2002	
		2002		Completed in CY 2002 except for repaving			Into FY 2003	
Monitoring Well Project (DP)	LANL-98-048	2001	CX	Started			Into FY 2004	
Monitoring Well Project (NA)		2002	CX				Into FY 2012	
TA-15 Electrical Distribution Upgrade	LANL-00-050	2001	CX	Started				Into FY 2002
TA-15 Electrical Infrastructure Upgrades		2002						Into FY 2003
TA-53-62 Cooling Tower Replacement	LANL-00-051	2001	CX					Into FY 2002
		2002		Completed				Into FY 2002
TA-53-64 Cooling Tower	LANL-00-052	2001	CX					Into FY 2002
		2002		Completed				Into FY 2002
Electrical Infrastructure Safety Upgrade (TA-03-40)	LANL-00-053	2001						Into FY 2002
Electrical Infrastructure Upgrade (TA-03-30)	LANL-02-071	2001	CX	-				Into FY 2002
Electrical Infrastructure Upgrade (TA-03-40)	LANL-02-071	2002						Into FY 2004
Electrical Infrastructure Safety Upgrade (TA-48-01)	LANL-00-054	2001	CX	-				Into FY 2003
		2002						Into FY 2004
Electrical Infrastructure Safety Upgrade (TA-46-31)	LANL-00-055	2001	CX	-				Into FY 2003
		2002						Into FY 2004
TA-53 Cooling Tower ^a	LANL-00-DD-03	2002						
WETF Public Address/Intercom System	LANL-01-059	2001	CX	-				Into FY 2001
		2002						Into FY 2002
Water Treatment (TA-03)	LANL-01-060	2001	CX	-				Into FY 2002
Cooling Tower Water Conservation		2002	CX					Into FY 2002

Table F-2. RTBF Operations of Facilities (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				GPE	CAPITAL EQUIPMENT PROJECTS	EXPENSE PROJECTS	GENERAL PLANT PROJECTS
Switch Yard Kicker	LANL-01-046	2001	CX	-		Into FY 2003		
		2002						Into FY 2002
Electrical Infrastructure Safety Upgrade (TA-16-200)	LANL-01-064	2001	CX	-				Into FY 2002
		2002	CX-TBD					Into FY 2002
TA-8 to TA-22 Connector Road	LANL-02-089	2002	CX-TBD					Into FY 2002
ESA-TA-16-200 HVAC and Electrical Upgrades		2001	CX-TBD	-				Into FY 2002
	LANL-02-072	2002						Into FY 2002
TA-21 HIC Move to TA-16-202	LANL-02-090	2001	CX-TBD	-				Into FY 2003
		2002						Into FY 2003
TA-16 Site Utilities and Roads	LANL-03-090	2001	EA-TBD	-				Into FY 2003
Roads and Utilities	LA-03-116	2002	CX-TBD					Into FY 2003
WETF 1.6 MVA Generator Installation	LANL-03-092	2001	CX-TBD	-				Into FY 2003
	LANL-02-092	2002						Into FY 2003
ESA-FM Weapons Support Building	LANL-03-093	2001	EA-TBD	-				Into FY 2003
Weapons Plant Support Building	LANL-02-093	2002	EA-TBD					Into FY 2002
FY02 RTBF Funded D&D ^b	LANL-02-DD-05	2002	CX-TBD					Into FY 2002
TSR Implementation	LANL-03-110	2002	CX-TBD				Into FY 2007	Into FY 2007
Security Upgrades/Fencing	LANL-03-109	2002	EA-Prep					Into FY 2003
Fabrication Facility	LANL-04-074	2002	EA-Prep					Into FY 2004
Central Auditorium Building 200	LANL-04-108	2001	CX-TBD	-				Into FY 2004
		2002						Into FY 2004
Lujan Center Neutron Production Target System	LANL-04-120	2001	SWEIS	-				Into FY 2004
		2002						Into FY 2004
Communication Shop Building	LANL-04-121	2001	CX	-				Into FY 2004
	LANL-05-121	2002						Into FY 2005
Vessel Facility 1 of 4	LANL-04-128	2001	CX-TBD	-				Into FY 2004
	LANL-06-128	2002						Into FY 2006
Vessel Facility 2 of 4	LANL-05-143	2001	CX-TBD	-				Into FY 2005
	LANL-07-143	2002						Into FY 2007
Calibration Laboratory	LANL-05-145	2001	EA-Prep	-				Into FY 2005
		2002						Into FY 2005

Table F-2. RTBF Operations of Facilities (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				GPE	CAPITAL EQUIPMENT PROJECTS	EXPENSE PROJECTS	GENERAL PLANT PROJECTS
Vessel Facility 3 of 4	LANL-06-152	2001	CX-TBD	-				Into FY 2006
	LANL-08-152	2002						Into FY 2008
Medium/Heavy Lab at TA-22	LANL-06-153	2001	EA-TBD	-				Into FY 2006
	LANL-08-153	2002						Into FY 2008
Vessel Facility 4 of 4	LANL-07-160	2001	CX-TBD	-				Into FY 2007
	LANL-09-160	2002						Into FY 2009
Pajarito Road TA-59 to TA-64 Access and Parking	LANL-07-162	2001	CX-TBD	-				Into FY 2007
Pajarito Road Access Control Stations	LANL-03-068	2002	CX-TBD					Into FY 2003
Replace Machine Shop at TA-22	LANL-08-166	2001	CX-TBD	-				Into FY 2008
	LANL-09-166	2002						Into FY 2009
Move Existing Vessel to TA-22	LANL-08-167	2001	CX-TBD	-				Into FY 2008
	LANL-09-167	2002						Into FY 2009
West Jemez/TA-16 Intersections	LANL-08-169	2001	CX-TBD	-				Into FY 2008
TA-16 Intersection	LANL-02-107	2002	CX					Into FY 2003
Bomb Proof at TA-22	LANL-09-175	2001	CX-TBD	-				Into FY 2009
	LANL-10-175	2002						Into FY 2010
Gas Gun Relocation TA-40 to TA-22	LANL-09-176	2001	CX-TBD	-				Into FY 2009
	LANL-10-176	2002						Into FY 2010
Classified HE Storage	LANL-10-180	2001	CX-TBD	-				Into FY 2010
	LANL-11-180	2002						Into FY 2011
Joint DX/ESA Conference Facility	LANL-10-181	2001	CX-TBD	-				Into FY 2010
	LANL-11-181	2002						Into FY 2011

^a D&D of the existing TA-53 cooling towers and support buildings is funded within the funded GPPs replacing the towers (900 square feet).

^b FY02 RTBF funding includes surveillance and maintenance of excess facilities; D&D of facilities in TA-03 and TA-16 with a total of 6,700 square feet.

Table F-3. Facilities and Infrastructure Recapitalization Program (FIRP)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY					
NAME	NUMBER				C	OPC	PE&D	EXPENSE PROJECTS	GENERAL PLANT PROJECTS	MAINTENANCE
Vulnerable Office Building Replacement #02-1	LANL-02-075	2001	CX-TBD	-					Into FY 2002	
Vulnerable Office Building Replacement – HSR Clinic		2002		Design and construction began in CY 2002					Into FY 2002	
Vulnerable Office Building Replacement #02-2	LANL-02-076	2001	CX-TBD	-					Into FY 2002	
Vulnerable Office Building Replacement – MST Office Building		2002		Construction began in CY 2002					Into FY 2002	
Vulnerable Office Building Replacement #02-3	LANL-02-077	2001	CX-TBD	-					Into FY 2002	
Vulnerable Office Building Replacement – S3 Office Building		2002		Design and construction began in CY 2002					Into FY 2002	
Vulnerable Office Building Replacement #02-4	LANL-02-078	2001	CX-TBD	-					Into FY 2002	
Vulnerable Office Building Replacement – D Office Building		2002		Construction began in CY 2002					Into FY 2002	
NMT Maintenance	LANL-02-215	2002	CX-TBD							Into FY 2002
FY02 FIRP Funded D&D	LANL-02-DD-06	2002	CX-TBD					Into FY 2002 ^a		
FY03 Planning	LANL-02-216	2002	CX-TBD					Into FY 2002		
Beryllium Technology Facility – Cartridge Filter House Install	LANL-01-063	2001	CX-TBD	-					Into FY 2002	
	LANL-03-063	2002							Into FY 2003	
Electrical Infrastructure Safety Upgrade (TA-3-261)	LANL-02-070	2001	CX	-					Into FY 2003	
	LANL-03-070	2002							Into FY 2003	
TA-08 Division Entrance Project	LANL-02-073	2001	CX	-					Into FY 2003	
	LANL-04-073	2002							Into FY 2005	
LANSCE Chiller Replacement	LANL-02-080	2001	CX	-					Into FY 2002	
	LANL-03-080	2002							Into FY 2004	
Electrical Infrastructure Safety Upgrade (TA-8-21)	LANL-03-082	2001	CX-TBD	-					Into FY 2004	
		2002							Into FY 2003	
<i>Not used</i>	<i>LANL-01-034</i>	<i>2001</i>								

Table F-3. Facilities and Infrastructure Recapitalization Program (FIRP) (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY					
NAME	NUMBER				C	OPC	PE&D	EXPENSE PROJECTS	GENERAL PLANT PROJECTS	MAINTENANCE
Electrical Infrastructure Safety Upgrade (TA-43-1)	LANL-03-034	2002	CX-TBD						Into FY 2004	
HE Pressing Consolidation (TA-16-260)	LANL-03-081	2002	EA-FONSI						Into FY 2004	
Hydrotest Design Facility	LANL-03-104	2002	CX-TBD						Into FY 2003	
Electrical Infrastructure Safety Upgrade (TA-46-1)	LANL-03-083	2001	CX-TBD	-					Into FY 2004	
	LANL-04-083	2002							Into FY 2004	
Electrical Infrastructure Safety Upgrade (TA-53-2)	LANL-03-084	2001	CX-TBD	-					Into FY 2004	
	LANL-04-084	2002							Into FY 2004	
Electrical Infrastructure Safety Upgrade (TA-59-1)	LANL-03-085	2001	CX-TBD	-					Into FY 2004	
	LANL-04-085	2002							Into FY 2004	
Electrical Infrastructure Safety Upgrade (TA-15-40)	LANL-03-086	2001	CX-TBD	-					Into FY 2004	
	LANL-04-086	2002							Into FY 2004	
Electrical Infrastructure Safety Upgrade (TA-15-183)	LANL-03-087	2001	CX-TBD	-					Into FY 2004	
	LANL-04-087	2002							Into FY 2004	
TA-9-38, 40, 42, 46 Steam to Hot Water Heating Conversion	LANL-03-088	2001	CX-TBD	-					Into FY 2003	
	LANL-04-088	2002							Into FY 2004	
Advanced Manufacturing Offices	LANL-04-098	2002	CX-TBD						Into FY 2004	
ESA-FM Office Building	LANL-04-099	2002	CX-TBD						Into FY 2004	
TA-48 Rad Liquid Waste Line Replacement	LANL-03-094	2001	CX-TBD	-					Into FY 2003	
	LANL-05-094	2002							Into FY 2005	
Electrical Infrastructure Safety Upgrade (TA-3-32)	LANL-04-100	2001	CX-TBD	-					Into FY 2005	
	LANL-05-100	2002							Into FY 2005	
Electrical Infrastructure Safety Upgrade (TA-35-2)	LANL-04-101	2001	CX-TBD	-					Into FY 2005	
	LANL-05-101	2002							Into FY 2005	
Electrical Infrastructure Safety Upgrade (TA-35-27)	LANL-04-102	2001	CX-TBD	-					Into FY 2005	
	LANL-05-102	2002							Into FY 2005	
Electrical Infrastructure Safety Upgrade (TA-33-114)	LANL-04-103	2001	CX-TBD	-					Into FY 2005	
	LANL-05-103	2002							Into FY 2005	
Electrical Infrastructure Safety Upgrade (TA-39-2)	LANL-05-135	2002	CX-TBD						Into FY 2005	
Electrical Infrastructure Safety Upgrade (TA-46-30)	LANL-05-136	2001	CX-TBD	-					Into FY 2005	
		2002							Into FY 2005	

Table F-3. Facilities and Infrastructure Recapitalization Program (FIRP) (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY					
NAME	NUMBER				C	OPC	PE&D	EXPENSE PROJECTS	GENERAL PLANT PROJECTS	MAINTENANCE
Vulnerable Office Building Replacement #04-1	LANL-04-104	2001	CX-TBD	-					Into FY 2004	
	LANL-04-105	2002							Into FY 2004	
Vulnerable Office Building Replacement #04-2	LANL-04-105	2001	CX-TBD	-					Into FY 2004	
	LANL-04-106	2002							Into FY 2004	
Vulnerable Office Building Replacement #04-3	LANL-04-106	2001	CX-TBD	-					Into FY 2004	
Shock and Vibration Laboratory	LANL-04-111	2001	EA-Prep	-					Into FY 2004	
	LANL-03-111	2002	EA-FONSI						Into FY 2003	
FWO Office Building	LANL-03-079	2002	CX-TBD						Into FY 2003	
CCF Electrical Upgrades	LANL-03-057	2002	CX-TBD						Into FY 2003	
HVAC Upgrades to North Wing of TA-43-1	LANL-03-058	2002	CX-TBD						Into FY 2003	
TA-46-24 Roof Replacement	LANL-03-061	2002	CX-TBD						Into FY 2003	
Roofing Assessment	LANL-03-053	2002	CX-TBD						Into FY 2003	
Safety/Infrastructure GPPs	LANL-03-217	2002	CX-TBD						Into FY 2003	
FY03 FIRP Funded D&D	LANL-03-DD-08	2001	CX-TBD	-				Into FY 2003 ^b		
		2002						Into FY 2003 ^c		
FY04 Planning	LANL-03-063	2002	N/A					Into FY 2003		
TA-16-450 Gas Transfer System	LANL-04-112	2001	CX-TBD	-					Into FY 2005	
		2002							Into FY 2005	
Reconfigure TA-39-98, Close TA-39-2, 39-103, 39-07	LANL-04-113	2001	CX-TBD	-					Into FY 2004	
		2002							Into FY 2004	
TA-53 Replace Roofs	LANL-04-118	2001	CX	-					Into FY 2004	
		2002							Into FY 2004	
TA-35 TSL-189 Trident Laser HVAC Upgrades	LANL-05-119	2001	CX	-					Into FY 2004	
		2002							Into FY 2005	
Convert Heating System and Upgrade Controls at TA-48-RC1	LANL-04-124	2001	CX-TBD	-					Into FY 2004	
	LANL-05-124	2002							Into FY 2005	
HVAC/Electrical Upgrade, MPF-6	LANL-04-125	2001	CX-TBD	-					Into FY 2004	
	LANL-05-125	2002							Into FY 2005	
Otowi Floor Replacement/Upgrades	LANL-04-126	2001	CX-TBD	-					Into FY 2005	
		2002							Into FY 2005	
Electronics/Data Systems Building	LANL-04-127	2001	CX-TBD	-					Into FY 2004	
	LANL-05-127	2002							Into FY 2005	

Table F-3. Facilities and Infrastructure Recapitalization Program (FIRP) (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY					
NAME	NUMBER				C	OPC	PE&D	EXPENSE PROJECTS	GENERAL PLANT PROJECTS	MAINTENANCE
Firing Site Consolidation	LANL-04-129	2001	CX-TBD	-					Into FY 2004	
	LANL-05-129	2002							Into FY 2005	
Building 193 Reconfiguration	LANL-04-130	2001	EA-Prep	-					Into FY 2005	
		2002	EA-FONSI						Into FY 2005	
Electrical Infrastructure Safety Upgrades (TA-9-45)	LANL-05-095	2002	CX-TBD						Into FY 2005	
GTS SLEP Support Building	LANL-04-132	2001	EA-Prep	-					Into FY 2005	
		2002							Into FY 2005	
FY04 FIRP Funded D&D	LANL-04-DD-10	2002	CX-TBD					Into FY 2004 ^d		
FY05 Planning	LANL-04-218	2002	N/A					Into FY 2004		
Electrical Infrastructure Safety Upgrade (TA-9-35)	LANL-05-137	2001	CX-TBD	-					Into FY 2005	
		2002							Into FY 2005	
Electrical Infrastructure Safety Upgrade (TA-3-39)	LANL-05-138	2001	CX-TBD	-					Into FY 2006	
		2002							Into FY 2006	
Electrical Infrastructure Safety Upgrade (TA-3-102)	LANL-05-139	2001	CX-TBD	-					Into FY 2005	
		2002							Into FY 2005	
Vulnerable Office Building Replacement #05-1	LANL-05-140	2001	CX-TBD	-					Into FY 2005	
		2002							Into FY 2005	
Vulnerable Office Building Replacement #05-2	LANL-05-141	2001	CX-TBD	-					Into FY 2005	
		2002							Into FY 2005	
Vulnerable Office Building Replacement #05-3	LANL-05-142	2001	CX-TBD	-					Into FY 2005	
		2002							Into FY 2005	
Safety/Infrastructure GPPs	LANL-05-219	2002	CX-TBD						Into FY 2005	
FY05 FIRP Funded D&D	LANL-05-DD-12	2002	CX-TBD					Into FY 2005 ^e		
FY06 Planning	LANL-05-220	2002	CX-TBD					Into FY 2005		
Power Grid Infrastructure Upgrade ^f	LANL-06-020	2001	EA-FONSI			Into FY 2005	-			
		2002			Into FY 2007	Into FY 2005				
Electrical Infrastructure Safety Upgrade (TA-9-21)	LANL-06-148	2001	CX-TBD	-					Into FY 2006	
		2002							Into FY 2006	
Vulnerable Office Building Replacement #06-1	LANL-06-149	2001	CX-TBD	-					Into FY 2006	
		2002							Into FY 2006	
Vulnerable Office Building Replacement #06-2	LANL-06-150	2001	CX-TBD	-					Into FY 2006	
		2002							Into FY 2006	

Table F-3. Facilities and Infrastructure Recapitalization Program (FIRP) (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY					
NAME	NUMBER				C	OPC	PE&D	EXPENSE PROJECTS	GENERAL PLANT PROJECTS	MAINTENANCE
Vulnerable Office Building Replacement #06-3	LANL-06-151	2001	CX-TBD	-					Into FY 2006	
		2002							Into FY 2006	
Safety/Infrastructure GPPs	LANL-06-221	2002	CX-TBD						Into FY 2006	
FY06 FIRP Funded D&D	LANL-06-DD-15	2002	CX-TBD					Into FY 2006 ^g		
FY07 Planning	LANL-06-222	2002	CX-TBD					Into FY 2006		
Infrastructure Roof Upgrades	LANL-07-023	2002	CX-TBD		Into FY 2012	Into FY 2005	Into FY 2007			
LANL Infrastructure Revitalization	LANL-07-025	2002	CX-TBD		Into FY 2010	Into FY 2012	Into FY 2007			
Vulnerable Office Building Replacement #07-1	LANL-07-157	2001	CX-TBD	-					Into FY 2007	
		2002							Into FY 2007	
Vulnerable Office Building Replacement #07-2	LANL-07-158	2001	CX-TBD	-					Into FY 2007	
		2002							Into FY 2007	
Vulnerable Office Building Replacement #07-3	LANL-07-159	2001	CX-TBD	-					Into FY 2007	
		2002							Into FY 2007	
Safety/Infrastructure GPPs	LANL-07-223	2002	CX-TBD						Into FY 2007	
FY07 FIRP Funded D&D	LANL-07-224	2002	CX-TBD					Into FY 2007 ^h		
FY08 Planning	LANL-07-225	2002	CX-TBD					Into FY 2007		
Vulnerable Facility Replacement Program	LANL-08-024	2002	CX-TBD		Into FY 2010	Into FY 2010	Into FY 2008			
Vulnerable Office Building Replacement #08-1	LANL-08-163	2001	CX-TBD	-					Into FY 2008	
		2002							Into FY 2008	
Vulnerable Office Building Replacement #08-2	LANL-08-164	2001	CX-TBD	-					Into FY 2008	
		2002							Into FY 2008	
Vulnerable Office Building Replacement #08-3	LANL-08-165	2001	CX-TBD	-					Into FY 2008	
		2002							Into FY 2008	
Safety/Infrastructure GPPs	LANL-08-226	2002	CX-TBD						Into FY 2008	
FY08 FIRP Funded D&D	LANL-08-227	2002	CX-TBD					Into FY 2008 ⁱ		
FY09 Planning	LANL-08-228	2002	CX-TBD					Into FY 2008		
Vulnerable Office Building Replacement #09-1	LANL-09-172	2001	CX-TBD	-					Into FY 2009	
		2002							Into FY 2009	
Vulnerable Office Building Replacement #09-2	LANL-09-173	2001	CX-TBD	-					Into FY 2009	
		2002							Into FY 2009	

Table F-3. Facilities and Infrastructure Recapitalization Program (FIRP) (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY					
NAME	NUMBER				C	OPC	PE&D	EXPENSE PROJECTS	GENERAL PLANT PROJECTS	MAINTENANCE
Vulnerable Office Building Replacement #09-3	LANL-09-174	2001	CX-TBD	-					Into FY 2009	
		2002							Into FY 2009	
Safety/Infrastructure GPPs	LANL-09-229	2002	CX-TBD						Into FY 2009	
FY09 FIRP Funded D&D	LANL-09-230	2002	CX-TBD					Into FY 2009 ^j		
FY10 Planning	LANL-08-231	2002	CX-TBD					Into FY 2009		
Vulnerable Office Building Replacement #10-1	LANL-10-178	2001	CX-TBD	-					Into FY 2010	
		2002							Into FY 2010	
Vulnerable Office Building Replacement #10-2	LANL-10-179	2001	CX-TBD	-					Into FY 2010	
		2002							Into FY 2010	
Safety/Infrastructure GPPs	LANL-10-232	2002	CX-TBD						Into FY 2010	
FY10 FIRP Funded D&D	LANL-10-233	2002	CX-TBD					Into FY 2010 ^k		
FY11 Planning	LANL-10-234	2002	CX-TBD					Into FY 2010		
Safety/Infrastructure GPPs	LANL-11-235	2002	CX-TBD						Into FY 2011	
FY11 FIRP Funded D&D	LANL-11-236	2002	CX-TBD					Into FY 2011 ^l		
FY12 Planning	LANL-11-237	2002	CX-TBD					Into FY 2011		
Safety/Infrastructure GPPs	LANL-12-238	2002	CX-TBD						Into FY 2012	
FY12 FIRP Funded D&D	LANL-12-239	2002	CX-TBD					Into FY 2012 ^m		
FY13 Planning	LANL-12-240	2002	CX-TBD					Into FY 2012		

^a FY02 F&I funding is planned for D&D of TA-3 and TA-16 facilities with a total of 76,800 square feet.

^b Identified as D&D in FY 2002 TYCSP.

^c FY03 F&I funding is planned for the D&D of facilities at TA-16 and TA-3 with a total of 119,500 square feet.

^d FY04 F&I funding is planned for the D&D of facilities at TA-3, TA-6, TA-16, TA-21 and TA-69 with a total of 81,100 square feet.

^e FY05 F&I funding for the D&D of structures to be prioritized in FY03.

^f Identified as proposed in 2001 TYCSP with proposal including TEC funding.

^g FY06 F&I funding for the D&D of structures to be prioritized in FY04.

^h FY07 F&I funding for the D&D of structures to be prioritized in FY05.

ⁱ FY08 F&I funding for the D&D of structures to be prioritized in FY06.

^j FY09 F&I funding for the D&D of structures to be prioritized in FY07.

^k FY10 F&I funding for the D&D of structures to be prioritized in FY08.

^l FY11 F&I funding for the D&D of structures to be prioritized in FY09.

^m FY12 F&I funding for the D&D of structures to be prioritized in FY10.

Table F-4. Non-RTBF and Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Line Item and Proposed Capital Projects

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY							
NAME	NUMBER				EXISTING LINE ITEMS		PROPOSED CAPITAL PROJECTS			CERRO GRANDE REHABILITATION LINE ITEMS		
					TEC	OPC	PE&D	TEC	OPC	TEC	OPC	GPP
Spallation Neutron Source Line Accelerator	LANL-99-004	2001	EA-TBD	-	-	-						
		2002	N/A		-	-						
NMSSUP, Phase I	LANL-99-005	2001	CX	Started	Into FY 2005	Into FY 2006						
		2002			Into FY 2003	Into FY 2006						
TA-53 Isotope Production Facility	LANL-99-006	2001	EA-CX	Started	Into FY 2002	Into FY 2003						
		2002	CX		Into FY 2002	Into FY 2003						
NISC	LANL-00-008	2001	EA-FONSI	Started	Into FY 2003	Into FY 2004						
		2002		Construction continued in CY 2002	Into FY 2002	Into FY 2004						
Los Alamos CINT Gateway	LANL-02-010	2001	EA-TBD	-			Into FY 2002	Into FY 2004	Into FY 2005			
		2002	CX				Into FY 2003	Into FY 2005	Into FY 2006			
Fuel Cell Facility	LANL-03-013	2001	EA-TBD	-		-		Into FY 2004	Into FY 2002			
		2002					-	Into FY 2004	Into FY 2002			
Bypass Roads	LANL-04-017	2002	EA-TBD				-	Into FY 2006	Into FY 2006			
NMSSUP Phase 2a	LANL-04-014	2001	CX	-		-		Into FY 2006	Into FY 2007			
	LANL-05-014	2002					-	Into FY 2007	Into FY 2004			

Table F-4. Non-RTBF and Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Line Item and Proposed Capital Projects (continued)

[illegible]

Table F-4. Non-RTBF and Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Line Item and Proposed Capital Projects (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY							
NAME	NUMBER				EXISTING LINE ITEMS		PROPOSED CAPITAL PROJECTS			CERRO GRANDE REHABILITATION LINE ITEMS		
					TEC	OPC	PE&D	TEC	OPC	TEC	OPC	GPP
Emergency Generator and Motor Control Center	LANL-01-037	2001	EA-FONSI	Started								Into FY 2002
		2002		Design and acquisition in process in CY 2002								Into FY 2002
Pajarito Road Gas Line	LANL-01-038	2001	CX	Started								Into FY 2002
		2002										Into FY 2002
WTA Substation	LANL-01-039	2001	EA-FONSI	Started								Into FY 2001
		2002										-
Building 202 Upgrade	LANL-01-040	2001	EA-Draft	-								Into FY 2001
		2002										-
Well-Head Protection	LANL-01-041	2001	CX	-								Into FY 2001
		2002										-
Internal Connectivity	LANL-01-042	2001	CX	-								Into 2001
		2002	EA-FONSI									-
Replacement of Destroyed/Damaged Program Equipment	LANL-01-043	2001	CX	Started								Into FY 2001
		2002										-
High Activity Waste Storage Facility	LANL-01-044	2001	CX	-								Into FY 2001
		2002										-

Table F-5. Non-RTBF Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Expense, General Plant, Institutional General Plant, and Institutional Projects

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				EXPENSE PROJECTS	GENERAL PLANT PROJECTS	INSTITUTIONAL GENERAL PLANT PROJECTS	INSTITUTIONAL
Monitoring Well Project (ER)	LANL-98-049	2001	CX	Started	Into FY 2004			
		2002			Into FY 2004			
PTLA Live Fire House	LANL-01-062	2001	CX	-		Into FY 2001		
		2002		Construction started in CY 2002	Into FY 2002			
High Power Detonator Facility	LANL-01-056	2001	SWEIS	-		Into FY 2002		
		2002				Into FY 2002		
Bioscience Level 3 Laboratory	LANL-02-065	2001	EA-Prep	-		Into FY 2002		
		2002		Construction started in CY 2002		Into FY 2002		
TA-55 Unclassified Office Building	LANL-02-066	2001	CX			Into FY 2002		
Manufacturing Technical Support Facility		2002		Construction started in CY 2002		Into FY 2002		
OLASO Office Building	LANL-02-067	2001	CX	-		Into FY 2002		
		2002				-		
TA-16 Site Utilities and Roads	LANL-03-091	2001	EA-TBD	-		Into FY 2003		
	LANL-02-091	2002				Into FY 2003		
TA-15 Firing Sites Support Facility	LANL-03-096	2001	CX-TBD	-		Into FY 2003		
Firing Point Beryllium Mitigation, TA-15-312		2002	CX-TBD			Into FY 2003		
Stockpile Support Building	LANL-03-114	2002	CX-TBD			Into FY 2003		
Homeland Security Building	LANL-03-131	2002	CX-TBD			Into FY 2003		
DX Transition Office Building	LANL-03-242	2002	CX-TBD			Into FY 2003		
TA-50-37 RAMROD Upgrade for Act. Chem.	LANL-04-115	2001	CX-TBD	-		Into FY 2004		
		2002				Into FY 2004		
TA-03-1698 Offices above Microscope Labs	LA-04-117	2001	CX	-		Into FY 2004		
		2002				Into FY 2004		
Royal Crest Intersection Improvements	LANL-04-122	2001	CX	-		Into FY 2004		
		2002			Into FY 2004			

Table F-5. Non-RTBF Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Expense, General Plant, Institutional General Plant, and Institutional Projects (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				EXPENSE PROJECTS	GENERAL PLANT PROJECTS	INSTITUTIONAL GENERAL PLANT PROJECTS	INSTITUTIONAL
TA-64 HAZMAT Vehicle Entrance	LANL-04-123	2001	CX-TBD	-		Into FY 2004		
		2002			Into FY 2004			
East Jemez Upgrade (Landfill to Royal Crest)	LANL-04-133	2001	CX-TBD	-	Into FY 2004			
		2002			Into FY 2004			
Parking Structure	LANL-04-134	2001	CX-TBD	-	Into FY 2004			
		2002			Into FY 2004			
New TA-51/54 Intersection	LANL-05-146	2001	CX-TBD			Into FY 2005		
		2002				Into FY 2005		
Anchor Ranch Road South	LANL-05-147	2001	CX-TBD			Into FY 2005		
		2002				Into FY 2005		
Anchor Road North	LANL-06-154	2001	CX-TBD			Into FY 2006		
		2002				Into FY 2006		
West Jemez from Casa Grande to West Road	LANL-06-155	2001	CX-TBD			Into FY 2006		
		2002				Into FY 2006		
Widen Pajarito Road TA-18 to TA-54	LANL-06-156	2001	EA-TBD			Into FY 2006		
		2002				Into FY 2006		
Pistol Range Intersection	LANL-07-161	2001	CX-TBD			Into FY 2007		
		2002				Into FY 2007		
Pajarito Road TA-59 to TA-64 Access and Parking	LANL-07-162	2002	CX-TBD			Into FY 2007		
Upgrade Eniwetok to Sigma Mesa	LANL-08-168	2001	CX-TBD			Into FY 2008		
		2002				Into FY 2008		
West Jemez/TA-16 Intersection	LANL-08-169	2002	CX-TBD			Into FY 2008		
TA-53 Sidewalks	LANL-08-170	2001	CX-TBD	-		Into FY 2008		
		2002				Into FY 2008		
Upgrade Guardrails	LANL-08-171	2001	CX-TBD	-		Into FY 2008		
		2002				Into FY 2008		
TA-18 Intersection	LANL-09-177	2001	CX-TBD	-		Into FY 2009		
		2002				Into FY 2009		
West Jemez Overpass at TA-3	LANL-10-182	2001	CX-TBD	-		Into FY 2010		
		2002				Into FY 2010		

Table F-5. Non-RTBF Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Expense, General Plant, Institutional General Plant, and Institutional Projects (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				EXPENSE PROJECTS	GENERAL PLANT PROJECTS	INSTITUTIONAL GENERAL PLANT PROJECTS	INSTITUTIONAL
Badge Office	LANL-02-069	2001	CX			Into FY 2002		
	TBD	2002	CX-TBD			-		
BUS-4 Office Building	TBD	2002	CX-TBD			-		
Distribution Center	LANL-03-144	2002	CX-TBD				Into FY 2003	
Parking Structure	LANL-03-243	2002	CX-TBD				Into FY 2003	
TA-3 Steam Condensate Lines	LANL-00-183	2001	CX	Started				Into FY 2012
		2002						Into FY 2012
Flue Gas Recirculation Ductwork	LANL-00-184	2001	CX	-				Into FY 2003
		2002						Into FY 2003
Replace Broken Sewer Lines	LANL-01-185	2001	CX	-				Into FY 2005
		2002						Into FY 2005
Correct Cross Connectors	LANL-01-186	2001	CX	-				Into FY 2012
		2002						Into FY 2012
PP-Plant Condensate Return Piping	LANL-01-187	2001	CX	-				Into FY 2003
		2002						Into FY 2003
Replace Old 13.8 kV Switchgears	LANL-02-188	2001	CX-TBD	-				Into FY 2009
		2002						Into FY 2009
Replace 115kv Oil Circuit Breaker	LANL-02-189	2001	CX-TBD	-				Into FY 2009
		2002						Into FY 2009
PP – Steam Piping Replacement	LANL-02-190	2001	CX-TBD	-				Into FY 2002
		2002						Into FY 2002
PP – Feed Water Piping	LANL-03-191	2001	CX-TBD	-				Into FY 2004
		2002						Into FY 2003
White Rock 115 kV Ring Bus	LANL-04-192	2001	CX-TBD	-				Into FY 2004
		2002						Into FY 2004
115 kV Transmission System Protection	LANL-04-193	2001	CX-TBD	-				Into FY 2004
		2002						Into FY 2004
Add third 115 kV Transformer TA-53	LANL-05-194	2001	CX-TBD	-				Into FY 2005
		2002						Into FY 2005
Replace 13.8 kV Cable	LANL-05-195	2001	CX-TBD	-				Into FY 2009
		2002						Into FY 2009
TA-53 Substation 115 kV Ring Bus Upgrade	LANL-06-196	2001	CX-TBD	-				Into FY 2006
		2002						Into FY 2006

Table F-5. Non-RTBF Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Expense, General Plant, Institutional General Plant, and Institutional Projects (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				EXPENSE PROJECTS	GENERAL PLANT PROJECTS	INSTITUTIONAL GENERAL PLANT PROJECTS	INSTITUTIONAL
Replace TA-53 (2) 115 kV Transformers	LANL-07-197	2001	CX-TBD	-				Into FY 2008
		2002						Into FY 2008
Uncross NL and RL 115 kV Lines	LANL-07-198	2001	CX-TBD	-				Into FY 2010
		2002						Into FY 2007
PP – Cooling Tower Piping Replacement	LANL-10-199	2001	CX-TBD	-				Into FY 2010
		2002						Into FY 2010
Reconductor Norton Line	LANL-11-200	2001	CX-TBD	-				Into FY 2011
		2002						Into FY 2011
TA-3 South Sewer Relief Project	LANL-02-201	2001	CX-TBD	-				Into FY 2002
		2002						Into FY 2002
Express Feeder	LANL-02-202	2001	CX-TBD	-				Into FY 2002
		2002						Into FY 2002
New Border Station-East Jemez Road	LANL-02-203	2001	CX-TBD	-				Into FY 2002
		2002						Into FY 2002
90 MVAR SVC Capacitor	LANL-03-204	2001	CX-TBD	-				Into FY 2004
		2002						Into FY 2004
LAC Sewer Project	LANL-03-205	2001	EA-TBD	-				Into FY 2003
		2002	CX-TBD					Into FY 2003
Add Third 115 kV Transformer TA-3	LANL-05-206	2001	CX-TBD	-				Into FY 2005
		2002						Into FY 2005
TA-3/58 Gravity Line	LANL-05-207	2001	CX-TBD	-				Into FY 2005
		2002						Into FY 2005
345 kV Ring Bus Norton	LANL-06-208	2001	CX-TBD	-				Into FY 2007
		2002						Into FY 2007
100 psi Natural Gas Lines, TA-3	LANL-07-209	2001	CX-TBD	-				Into FY 2008
		2002						Into FY 2008
Add Second 115 kV Transformer TA-5 (ETA)	LANL-07-210	2002	CX-TBD					Into FY 2007
TA-70 115/13.8 kV Substation	LANL-08-211	2001	CX-TBD	-				Into FY 2008
		2002						Into FY 2008
TA-70 345/115 kV Substation	LANL-09-212	2001	CX-TBD	-				Into FY 2009
		2002						Into FY 2009

Table F-5. Non-RTBF Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Expense, General Plant, Institutional General Plant, and Institutional Projects (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				EXPENSE PROJECTS	GENERAL PLANT PROJECTS	INSTITUTIONAL GENERAL PLANT PROJECTS	INSTITUTIONAL
TA-3 Power Plant Backpressure Turbine	LANL-09-213	2001	CX-TBD	-				Into FY 2009
		2002						Into FY 2009
100 psi Natural Gas Lines, TA-16	LANL-11-214	2001	CX-TBD	-				Into FY 2012
		2002						Into FY 2012

Table F-6. Non-RTBF Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Maintenance, Standby Facility, Decommissioning and Demolition, and Facilities Management and Site Planning Projects

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				MAINTENANCE	STANDBY FACILITY ^a	DECOMMISSIONING AND DEMOLITION	FACILITIES MANAGEMENT AND SITE PLANNING
F&I Initiatives Maintenance		2001	-	-	Into FY 2004			
		2002			Into FY 2004			
Preventive Maintenance – included in General Maintenance		2001						
		2002						
Predictive Maintenance – included in General Maintenance		2001						
		2002						
Corrective Maintenance – included in General Maintenance		2001						
		2002						
Maintenance Management - included in General Maintenance		2001						
		2002						
General Maintenance		2001	-	-	Into FY 2012			
		2002			Into FY 2012			
NISC Funded Decommissioning and Demolition	LANL-00-DD-04	2002	EA-FONSI				^b	
TSTA	LANL-TBD-DD-16	2001	CX-TBD	-			Into FY 2003	
		2002					^c	
DP-West and Ion Beam Facility	LANL-TBD-DD-17	2001	CX-TBD	-			Into FY 2003	
		2002					^d	
TSFF		2001	CX-TBD	-	-			
	LANL-TBD-DD-18	2002					^e	

Table F-6. Non-RTBF Non-Facilities and Infrastructure Recapitalization Program (FIRP) Facilities and Infrastructure – Maintenance, Standby Facility, Decommissioning and Demolition, and Facilities Management and Site Planning Projects (continued)

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY			
NAME	NUMBER				MAINTENANCE	STANDBY FACILITY ^a	DECOMMISSIONING AND DEMOLITION	FACILITIES MANAGEMENT AND SITE PLANNING
Engineering		2001	-					Into FY 2012
		2002						Into FY 2012
Rental of Buildings and Land		2001	-					Into FY 2012
		2002						Into FY 2012
Facility Startup and Project Support		2001	-					-
		2002						
Other		2001	-					-
		2002						Into FY 2012
Utilities		2001	-					Into FY 2012
		2002						Into FY 2012
Ten Year Site Plans (All of Site Planning)		2001	-					Into FY 2012
		2002						Into FY 2012

^a Not applicable for LANL.

^b The NISC Line Item Project includes funding to remove 21 trailers/transportables with a total of 18,585 square feet.

^c Transfer of the 16,350 square foot TSTA Facility from the Offices of Science to EM is currently being negotiated. The schedule for decommissioning and demolition is unknown.

^d Transfer of the Ion Beam Facility (TA-3-16) and DP West at TA-21 from DP to EM is currently being negotiated. The schedule for decommissioning and demolition is unknown.

^e Transfer of the 48,452 square foot TSFF Facility at TA-21 from DP to EM is anticipated to be proposed for FY 2004. The schedule for decommissioning and demolition is unknown.

Table F-7. Other General Plant Projects in 2001 TYCSP

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY
NAME	NUMBER				GENERAL PLANT PROJECTS
TSE Office Building	LANL-01-058	2001	CX	Completed	Into FY 2001
Site Prep for ASCI30T Initial and Phase I Installs	LANL-01-057	2001	EA-FONSI	-	Into FY 2001
TA-16-202 Room 107 Modifications	LANL-01-061	2001	CX	-	Into FY 2001
TA-03 Gateway Infrastructure	LANL-02-068	2001	CX-TBD	-	Into FY 2002
MX Cold Shop	LANL-02-074	2001	EA-Prep	-	Into FY 2002
Vulnerable Office Building Replacement #02-5	LANL-02-079	2001	CX-TBD	-	Into FY 2002
Building 260 Reconfiguration	LANL-02-081	2001	CX-TBD	-	Into FY 2002
Upgrade R Site Road (Access Safety Improvement)	LANL-03-089	2001	CX-TBD	-	Into FY 2003
TA-46 Air Exhaust System	LANL-03-095	2001	CX-TBD	-	Into FY 2003
DP-20 Safety/Infrastructure GPPs	LANL-03-097	2001	CX-TBD	-	Into FY 2003
DP-10 Safety/Infrastructure GPPs	LANL-03-098	2001	CX-TBD	-	Into FY 2003
Sigma GPP	LANL-03-099	2001	CX-TBD	-	Into FY 2003
WETF Systems Refurbishment	LANL-04-107	2001	CX-TBD	-	Into FY 2005
ESA Landscaping	LANL-04-109	2001	EA-Prep	-	Into FY 2004
Relocate JNETF and R&R NDE	LANL-04-110	2001	EA-Prep	-	Into FY 2005
SM-66 Electroplating Labs Renovation	LANL-04-114	2001	CX	-	Into FY 2004
TA-16 Security Upgrade	LANL-04-116	2001	CX-TBD	-	Into FY 2004
Hot Shop	LANL-04-131	2001	EA-Prep	-	Into FY 2004
Water Processing PMR/TCAP	LANL-05-144	2001	CX-TBD	-	Into FY 2006

Table F-8. Summary of Decommissioning and Demolition Projects

PROJECT		DATA FROM TYCSP	NEPA	CONSTRUCTION STATUS	FUNDING CATEGORY		
NAME	NUMBER				DECOMMISSIONING AND DEMOLITION CHARGES	PARTIAL D&D TRANSFER OF RESPONSIBILITY TO EM	FACILITIES MANAGEMENT & SITE PLANNING
Cerro Grande Rehabilitation Project	LANL-01-DD-01	2001	CX	Started	Into FY 2001		
Sherwood Building and Adjacent Structures	LANL-01-DD-02	2001	CX	Started	Into FY 2001		
TA-53 Cooling Towers	LANL-00-DD-03	2001	CX	-	-		
NISC Funded D&D	LANL-00-DD-04	2001	EA-FONSI	-	-		
		2002					
FY 02 RTBF Funded D&D	LANL-02-DD-05	2001	CX-TBD	-	Into FY 2002		
		2002			Into FY 2002		
FY 02 F&I Funded D&D	LANL-02-DD-06	2001	CX-TBD	-	Into FY 2002		
FY 02 FIRP Funded D&D		2002			Into FY 2002		
FY 03 RTBF Funded D&D	LANL-02-DD-07	2001	CX-TBD	-	Into FY 2003		
FY 03 F&I Funded D&D	LANL-03-DD-08	2001	CX-TBD	-	Into FY 2003		
FY 03 FIRP Funded D&D		2002			Into FY 2003		
FY 04 RTBF Funded D&D	LANL-04-DD-09	2001	CX-TBD	-	Into FY 2004		
FY 04 F&I Funded D&D	LANL-04-DD-10	2001	CX-TBD	-	Into FY 2004		
FY 04 FIRP Funded D&D		2002			Into FY 2004		
FY 05 RTBF Funded D&D	LANL-05-DD-11	2001	CX-TBD	-	Into FY 2005		
FY 05 F&I Funded D&D	LANL-05-DD-12	2001	CX-TBD	-	Into FY 2005		
FY 05 FIRP Funded D&D		2002			Into FY 2005		
SM-43 D&D	LANL-06-DD-13	2001	CX-TBD	-	-		
FY 06 RTBF Funded D&D	LANL-06-DD-14	2001	CX-TBD	-	Into FY 2006		
FY 06 F&I Funded D&D	LANL-06-DD-15	2001	CX-TBD	-	Into FY 2006		
FY 06 FIRP Funded D&D		2002			Into FY 2006		
TSTA	LANL-TBD-DD-16	2001	CX-TBD		Into FY 2003		
		2002				-	
DP-West and Ion Beam Facility	LANL-TBD-DD-17	2001	CX-TBD		Into FY 2003		
		2002				-	
TSFF	LANL-TBD-DD-18	2001	CX-TBD	-	-		
FY 07 FIRP Funded D&D	LANL-07-224	2002	CX-TBD		Into FY 2007		
FY 08 FIRP Funded D&D	LANL-08-227	2002	CX-TBD		Into FY 2008		
FY 09 FIRP Funded D&D	LANL-09-230	2002	CX-TBD		Into FY 2009		
FY 10 FIRP Funded D&D	LANL-10-233	2002	CX-TBD		Into FY 2010		
FY 11 FIRP Funded D&D	LANL-11-236	2002	CX-TBD		Into FY 2011		
FY 12 FIRP Funded D&D	LANL-12-239	2002	CX-TBD		Into FY 2012		

To obtain a copy of the SWEIS Yearbook – 2002, contact Ken Rea,
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on the web at:

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